



Metadata Usefulness Evaluation of the Moving Image Collections

Judy Jeng, Ph. D.

jjeng@njcu.edu

<http://web.njcu.edu/sites/faculty/jjeng/>

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MIC Evaluation Team

- Tefko Saracevic
- Judy Jeng
- Ying Zhang
- Yuelin Li

Overview of the Study

- This study evaluates metadata usefulness of the Moving Image Collections (<http://mic.imtc.gatech.edu>) using FRBR's identified four tasks (find, identify, select, obtain) as a framework.



MIC (Moving Image Collections)

- MIC is a collaboration of organizations and individuals in moving image archives, information technology, and digital education.
- MIC is sponsored by the Library of Congress and the Association of Moving Image Archivists (AMIA), and funded in large part by the National Science Foundation (NSF).
- MIC is part of the National Science Digital Library.
- MIC documents moving image collections around the world through a catalog of titles and directory of repositories, providing a window to the world's moving image collections for discovery, access and preservation.



Two components in MIC

- Collections Explore

A union catalog

- Archive Explore

An organization directory



Three Portals

- General Users
- Archivists
- Science Educators

Diverse Metadata Schema

- At Present:
 - MARC
 - MPEG-7 (Multimedia Content Description Interface)
- Will Add Later:
 - Dublin Core
 - MODS (Metadata Object Description Schema)

Data elements from virtually any schema can be mapped, or translated, to and from MIC's 48 fields registry.

Dimension of Usability

- A multidimensional construct

Interface effectiveness, usefulness, usability, ease of use, effectiveness, efficiency, satisfaction, learnability, memorability, error tolerant, understandability, appropriate level of interaction, control, helpfulness, adaptability, the quality of being engaging, and flexibility

- User focus



Evaluation Criteria – Metadata Usefulness

- Usefulness examines “Did it really help me?”
- Usefulness is one of the Usability criteria

FRBR

- FRBR stands for *Functional Requirements for Bibliographic Records*
- Entity-relationship model (*work, expression, manifestation, item*)
- Identifies four specific user tasks: *find, identify, select, obtain*

Our Evaluation Questions

1. How useful are the metadata fields in ***finding*** moving images that correspond to given scenarios?
2. From the set of records retrieved, how useful are the metadata fields in ***identifying*** moving images that are potentially relevant to given scenarios?
3. From the ones identified as potentially relevant, how useful are the metadata fields in ***selecting*** those that would like to obtain in relation to given scenarios?
4. How useful are various metadata fields in providing useful information for ***obtaining*** the selected moving images from an organization?



Research Methodology

- April 2003 – July 2004
- 138 participants
- 2 online surveys (1 for the Collections Explore and 1 for the Archive Explore)
- 1 metadata experiment
- 1 formal usability test on MIC homepage on clarity, informativeness, learnability, visual attractiveness, consistency, labeling and terminology, navigation, user lostness, and satisfaction



Ten Most Useful Metadata Fields in Archive Explore

- **Find:** Organization Name, State or Region, Organization Type, City, Classes of Materials, Subjects, Country, Physical Formats, Parent Organization, Services
- **Identify:** Organization Name, URL, Address, Physical Formats, Country, Subjects, State or Region, City, Classes of Materials, Service Restrictions
- **Select:** Organization Name, Country, Services, Loan Policy, Physical Formats, Sell Policy, State of Region, Subjects, Classes of Materials, City
- **Obtain:** Primary Contact, Organization's URL, URL for Obtaining Resources, Phone Number, Mailing Address, Loan Policy, Sell Policy, Restrictions, Fax Number, Explanations of Complex Situations



Ten Most Useful Metadata Fields in Collections Explore

- **Find:** Subjects, Title, Form, Date, Summary Note, Language, Content Note, Type (film, video, etc.), Organization Name, Carrier Type
- **Identify:** Title, Date, Summary Note, Subjects, Physical Descriptions, Form, Duration, Content Note, Organization Name, Type (film, video, etc.)
- **Select:** Access Restrictions, Type (film, video, etc.), Organization Name, Physical Descriptions, Duration, Date, Form, Subjects, Carrier Type, Content Notes
- **Obtain:** Access Restrictions, Primary Contact, Access Policy, Sale Policy, Organization Name, Copy Locator, Loan Policy, E-mail Address, Phone Number, Type (film, video, etc.)



Findings from the Metadata Experiment: Ten Most Useful Metadata Fields

1. Subject
2. Abstract
3. Main Title
4. Alternative Title
5. Language
6. Series Title
7. Media Profile
8. Form
9. Audience
10. Origin Location

Contributions

- Find what information is “enough” for each of the user tasks.
- Identify core elements of bibliographic records for moving images.
- Each metadata field plays a different level of importance in the process of finding, identifying, selecting, and obtaining materials.
- The findings are helpful in understanding MIC users’ needs in the information retrieval process when they use MIC union catalog and its organization directory.
- Help MIC designers in selecting what metadata fields to retain and the order of display.
- Library literature has centered on FRBR’s entity-relationship model. This study is unique in that it discusses catalog users’ information needs in the information retrieval process using FRBR’s four user tasks (find, identify, select, and obtain) as a framework.