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Proposal of application profile for Digital Images for Libraries, Archives and Museums (DILAM) conceptual model

Proposta de um perfil de aplicação para o modelo conceitual Digital Images for Libraries, Archives and Museums (DILAM)

Keywords: Conceptual model DILAM; Digital image; Description of digital image.

1. Introduction

Images have grown on social media and the Web at an exponential level since digital cameras are increasingly available. Several media resources provide digital images, and the archives, libraries and museums need extend possibilities of images use and reuse. Due to the amount of information, the procedures for location and recovery of expressions are difficult tasks to the user. This is an effect of the variety of needed features to describe the digital image. Therefore, this research focuses on the questioning about the conceptual description of the digital image. It is based on the principles of archivology, librarianship and museology. These principles are characterized by the elements of the domain and the structure of the environment, used to describe the characteristics of the resource. The challenge was to represent digital image and specifics elements with an investigative approach. Considering the integrative and divergent features among its descriptive principles of archives, libraries, and museums, the aim is to propose a domain model for digital image resource. The method is an applied theoretical and qualitative, in relation to development objectives. As well as exploratory, because of the data collection consist on the bibliographic survey in a worldwide level, in order to clarify the problem of study.

3. DILAM steps

The modeling process was based on three steps. The first step made from the parameters of the models studied and descriptive essence of a digital image. Thus, functional requirements to the DILAM are: a) find or explore the features of image collection, b) choose the desired pictures between the subjects, using attributes and relationships, c) recognize the responsibilities of creating a digital image resource, getting the credit, using attributes and relationships, d) obtain image feature, selected and identified (Simionato, 2015a). The second step consists on choosing the appropriate metadata derived from the crosswalk method (St. Pierre & LaPlant, 1998). Some metadata standards were used, such as: Anglo-American Cataloguing Rules second edition revised (AACR2r), Cataloging Cultural Objects (CCO), Categories for the Description of Works of Art (CDWA), Categories for the Description of Works of Art Lite (CDWA Lite), Describing Archives content standard (DACS), Dublin Core (DC), Encoded Archival Description (EAD), Graphic Materials, International Standard Archival Description General (ISAD(G)), International Bibliographic Description consolidated edition (ISBD), Resource Standard Description and Access (RDA), Rules for Archival Description (RAD), SPECTRUM and VRA Core. Finally, the last step determined that the qualities of entity relationship modeling could be compatible with entities composed of the FRBR family. They could also be compatible with the entities that match the integration of contexts. Chronos, for instance, is an entity identified in contexts and in the definition of the attributes needed on archives and museums. *Fysikos* is an entity needed for physical properties, as EXIF data. It is a part of the scope of museology in the cautious evaluation of the resource, on which the resources are the analog image if there was any damage or other occurrences. Ríza covers the specific needs for the identification of the origin and provenance. At last, the *Ergo* entity matches the needs that have to be reported, such as the classification, evaluation and curation (Simionato, 2015a).

2. DILAM conceptual model

The Digital Images for Libraries, Archives and Museums (DILAM) conceptual model was created based on the entity relationship modeling (Simionato, 2015a). Including the abstractions that these contexts brought to digital image and these difficulties to create an image domain. Is important say that DILAM is not a new standard metadata. DILAM conceptual model was also a consequence of the study of conceptual models for specific domains. For example, Functional Requirements for Bibliographic Records (FRBR), Authority (FRAD) and Subject (FRSAD), Conceptual Model for Archival Description (CMAD), Modular Requirements for Records Systems (MoReq) and Conceptual Reference Model (CRM).

Figure 1 shows the DILAM conceptual model, it can also be viewed through the link



Fig. 1. Digital Images for Libraries, Archives and Museums (DILAM) conceptual model

4. Final considerations

This research brings an approach to the context we live and know, the description in archives, libraries and museums, considering the new needs of linking and integration of data. After all, the sense of this subject among institutions converges and still presents differences. This context is important and it can be collaborative and cooperative with regard to technological advances in the information organization.

Although this research is under development, its results might enable the construction of an application profile based on guidelines for Dublin Core application profiles (Coyle & Baker, 2009). As a result, the domain model DILAM corresponds with the characteristics of the digital image resource. Furthermore, it confirms the collaboration between the descriptive principles of archives, libraries and museums.

References

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