InterPARES 2 Project
International Research on Permanent Authentic Records in Electronic Systems

Domain 3 Research Questions

Case Study 09(3): Digital Moving Images – Commercial Film Studio

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1. What types of entities does the diplomatic analysis identify in this case study? (i.e., records, publications, data, etc.)

The diplomatic analysis identifies that the digital image assets, which include the TIFF files related to each production of the Commercial Film Studio (hereinafter, CommStudio), as records. The editing process, all sound, and non-moving image materials were not evaluated by the investigators and, thus, are excluded from this analysis.

1a. If there are no records, should there be records? If not, why not?

Not applicable.

1b. If there should be records, what kinds of records should be created to satisfy the creator's needs (as defined by an archivist)?

Not applicable.

1c. What characteristics of records (as defined by an archivist) are missing yet necessary to preserve these entities?

Not applicable.

2. Are the entities reliable? If not, why not?

Yes, the digital assets are reliable. Each asset is created in a controlled environment by specialized individuals who have restricted access to create, modify and transfer digital assets. Furthermore, security is set-up at the directory level to monitor both the frequency of use and the life-cycle for each asset.

3. Are the entities accurate? If not, why not?

Yes, the digital assets are regarded as accurate. For assets to act upon other properly, each asset is registered with a specific naming convention. Files that cannot be opened are regarded as unreliable and are the result of a registration mishap.

4. To what degree can the entities be presumed to be authentic, and why?

Benchmark Requirements Supporting the Production of Authentic Copies of Electronic Records (these apply to the creator**)**:

The concept of authenticity used by the creator is based upon the historical ideal of the virtual reconstruction mirroring the original as closely as possible. However, this ideal is not in line with that supplied by the InterPARES Project. According to the following baseline requirements supporting the production of authentic copies of electronic records established by InterPARES 1, the digital entities of Altair4 can be presumed to be authentic at only a very low level. Only the metadata and daily backups contribute to ensuring the authenticity of the entities under examination in this case study.

1. **Capture of identity and integrity metadata:**
   Metadata that are captured for each digital asset include the following: the sequence, the scene, the name of the object and the version number.

2. **Enforcement of access privileges:**
   Each animator is given specific permissions that correlate to their job competency within CommStudio.

3. P**rotection against loss and corruption:**
   Not available.

4. P**rotection against media and technology obsolescence:**
   At the time of the report, there was no protection against technological obsolescence.

5. E**stablished documentary forms:**
   All digital assets follow an established documentary form that is set by CommStudio.

6. A**bility to authenticate records:**
   Each digital asset is assigned a version number that in turn authenticates the record.

7. P**rocedures in place to identify the authoritative record:**
   The version number identifies the authoritative record and is assigned through strict naming conventions. However, the system does not perform cross-checking to verify the authenticity of the assets.

8. P**rocedures in place to properly document removal and transfer of records from the creator's originating system:**
As outlined in the final report, digital assets are written to the DLT server at the end of their active lifecycle to a non-active status.

Baseline Requirements Supporting the Production of Authentic Copies of Electronic Records (these apply to the preserver):

Due to the lack of a formal recordkeeping system and a preserver, the following baseline requirements can only be answered in part:

1. **Controls over Records Transfer, Maintenance, and Reproduction:**
As stated in the previous answer, there are controls over the transfer of digital assets to the DLT server. This transfer is written in code when the digital assets are at the end of their active lifecycle.

2. **Documentation of Reproduction Process and its Effects:**
There is insufficient information to warrant an answer.

3. **Archival Description:**
There is insufficient information to warrant an answer.

5. For what purpose(s) are the entities to be preserved?

The final report states that the digital assets are preserved to serve production in the re-use of images, as well as for disaster planning. However, in most cases these digital assets that have been preserved and archived are rarely utilized; this is partly due to technological obsolescence of the digital asset. Therefore, when archived assets are no longer accessible, the studio chooses to recreate them over preservation.

6. Has the feasibility of preservation been explored?

No, the feasibility of preservation has not been explored by CommStudio. They do not regard preservation strategies as a concern and/or an issue at this present time.

6a. If yes, what elements and components need to be preserved?

Even though the final report states that preservation strategies are not an issue, the digital images that are archived should be preserved and maintained through technological obsolescence, i.e. the TIFF files.

7. Which preservation strategies might most usefully be applied, and what are their strengths and weaknesses, including costs and degree of technical difficulty?

Even though CommStudio is not fully concerned with the preservation of their digital assets, conversion/migration (i.e., Preservation Strategy B1.4 - Conversion) would be the most plausible solution. Migration would allow digital materials to be transferred from one hardware/software. Thus, migration would solve the issue of recreating a digital asset

each time it is deemed inaccessible due to technological obsolescence. This said, it is difficult to assert the cost involved for each of their works and the amount of assets involved.

7a. Which alternative preservation strategies might be applied? What are their strengths and weaknesses, including costs and degree of technical difficulty?

The following lists alternative preservation strategies that could be applied to CommStudio:

B1. Use of standards
B2.4.. Viewers and conversion at the point of access

8. What additional information does the preserver need to know to facilitate appraisal and preservation?

The preserver should understand how the entities were created through a complete understanding of the recordkeeping procedures.

8a. If required information is missing, where should it come from and how should it be made manifest?

It is not a problem that information is missing, but the fact the many times the TIFF files are inaccessible because of the lack of proper and consistent naming conventions. Therefore, formal recordkeeping procedures must document the correct naming procedures.

9. Are there any policies in place that affect preservation?

At the time of the report, there were no policies that would affect the preservation of the digital assets.

9a. Are there any policies in place that present obstacles to preservation?

Not available.

9b. Are there any policies that would need to be put in place to facilitate appraisal and preservation?

Before appraisal and preservation policies can be fully documented CommStudio must first seek to document their business transactions; in particular, identify and establish formal recordkeeping practices and procedures for the creation of its digital assets. In particular, document the procedures and/or workflow involved in the naming for effective and efficient retrieval of the digital file.