

The laboratory environment for this examination of alternatives would need to allow trial actions that can be examined and verified before the action is carried out on an entire group of records. This is no different from testing and evaluating new preservation tools in the physical world. The experimentation phase is also the time to ensure that the metadata of the transformed digital object correctly aligns with that of the original.

This is a relatively new set of preservation actions and will no doubt mature in coming decades. The question is how to manage something we cannot see, to ensure that information is not lost. It is the premise here that preservation professionals will want to engage with electronic holdings; they will be a normal part of our professional responsibility and a responsibility to the institutions we serve. We will need to form partnerships with archivists and information technology specialists to achieve the goal of providing electronic records to the public along with the traditional forms of holdings, digitized and in physical form. We would also want to recognize that there may be more than one preservation role. There will be those who analyze and develop strategies for reformatting and transformation that preserve essential characteristics and a role for the management of the systems and the risks, and professionals who implement the actions and validate and manage the records. There are skills common to both, but others are also distinct from one other.

### Operational best practices/additional useful concepts

Ideally the creators of the digital objects would provide the metadata and select the most appropriate digital object for preservation. Does anyone regularly prune their digital photographic files, identify who, when, where and what the event was, and put them into a named folder?

There are a few concepts that also have corollaries in the physical world that lead to sustainable digital culture. The concept of sustainability begins with thoughtful, informed creation and follows every step in the electronic life cycle. Preservation begins, as in the physical world, by using materials and techniques of creation that are known to be stable and have proven longevity. It is no different in the electronic world.

The purpose of using principles defined as ‘open’ is to ensure that the structure of the encoding is transparent and documented. This means that this information is available for future preservation actions when required. The opposite would be proprietary formats and systems or changes that have been made to the system without documentation.

The effort of preservation of digital culture will require new skills, new backgrounds and programmes that integrate the work of archivists, preservation specialists and IT systems development engineers