Impacts of Information Lifecycle Management and Physical Storage Systems on the Preservation of Digital Content

Preservation of digital content is a critical, emerging aspect of the academy’s stewardship responsibility. Digital preservation is the ongoing process of managing data for continuing access and use, and requires more than simply extending traditional preservation practices to digital information or assuming that media backups are sufficient. Effective digital preservation requires that we understand and attend to the full lifecycle of digital objects, i.e. the whole complex of roles and operations designed around management of information for long-term accessibility and usability. A successful digital preservation program must be seen as part of the day-to-day operations and basic systems of the organization as much as possible in order to ensure long-term accessibility and usability. The technical infrastructure required to support digital object preservation cannot be defined separately from the basic technical infrastructure of the enterprise.

In order to define a complete digital preservation management strategy, careful attention must be paid to fundamental technical infrastructure beginning with a managed approach to storage technologies & processes that incorporate preservation as a basic operating tenet. Physical storage technology requirements and architecture, as well as storage management processes and procedures, must be developed that address preservation needs as well as daily operational requirements in a cost-effective fashion.

Information lifecycle management and storage technologies are a rapidly evolving area. The implications for long-term management of digital content in all formats as well as short-term operational issues is of critical importance for campuses today.

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