

DOMAIN: Digital Preservation

ARTICLE: "A Social Model for Archiving Digital Serials: LOCKSS" Serials Review 2006: 32 :73 -77 written by Michael Seadle, Assistant Director for Info Technology, Michigan State University Libraries

ABSTRACT

What is a trusted repository in a digital environment? Given the mutability of digital documents within a digital environment, the article argues that a strictly technical explanation of server security to the questions of the authenticity and integrity of digital objects is an incomplete response and explores the social organization necessary for a digital archiving solution. The author concludes that in the emerging digital world, trusting a single provider, single institution and single archive may present unnecessary risks. Lots of Copies Keep Stuff Safe (LOCKSS), which originated at the Stanford University digital archiving project, is a community-based network of collaborators utilizing an open-source software model. This model strives to insure that authenticity and integrity of digital objects are successfully maintained through the bit-level comparisons of multiple originals held by multiple trusted collaborators.

+ The most important "trust factor" is whether or not a particular archive may be depended upon in the long term to keep an unaltered copy of the genuine original. Digital preservation requires the unaltered transmission of a work or an object's intellectual content.

+ A digital archiving system prudently assumes that files may undergo changes from malicious intent or due to an inadvertent failure of a storage medium.

+ For librarians and archivists to embrace the social structure of the LOCKSS community-based model for long-term archiving will require a shift of paradigm from a single original copy within a single durable medium to that of multiple true originals existing in a variety of transient media.