PORTICO

Overview of Portico

An Electronic Archiving Service

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Portico's History

- Launched by JSTOR in 2002 in response to the need to include electronic journals in the JSTOR archive. Builds upon the seminal work of the E-Journal Archiving Program of The Andrew W. Mellon Foundation (1999).

- Began with a pilot phase involving academic libraries and 10 publishers to identify and understand relevant technological and business issues and to develop a model that addressed needs of the scholarly publishing and academic communities.

- Pilot publishers included a variety of publishers (small scholarly societies, a university press, and commercial publishers) and representative methods of online publishing (SGML or XML, PDF, HTML, etc.).

Critical Issues Identified in Pilot Phase

- Technological challenges are plentiful.

  - Electronic-journals are produced in diverse formats, which may vary in format or data quality within a single title or publisher. The technological infrastructure must meet the challenges of this diversity.

  - Infrastructure required for digital preservation is extensive including hardware and staff with expertise. This infrastructure has real costs.

- Collaboration is essential.

  - The sheer scale of the digital material requiring preservation dictates that libraries build mechanisms for cooperative effort. Centers of specialty expertise may emerge.

  - For e-journal preservation, publisher cooperation is essential in order to ensure the timely deposit of content.

Critical Issues Identified in Pilot Phase

- Access to archived literature is a key issue for publishers and libraries.

  - If publishers perceive a competitive threat from the archive, they will not deposit content.

  - Libraries want assurance that when they need to access archived content it will be available.

- Financial sustainability must be secured.

  - As always, the source of financing for preservation is a key and challenging question. Digital preservation can be sustained only through reliable sources of funding, but who will pay?

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Portico's Mission

To preserve scholarly literature published in electronic form

and to ensure that these materials remain available

to future generations of scholars, researchers, and students.

What Portico Is

- An organization with a mission and singular focus to provide a permanent archive of born-electronic scholarly journals to ensure that over the long-term a valid, reliable copy of the work exists and is accessible.

- Protection against the potential loss of access to e-literature that forms a portion of the scholarly record and library collections.

- An centralized archive that is open to all peer-reviewed journals. Archived journals may have a print version in addition to an electronic version or they may be available only in electronic form.

What Portico Is Not

- An electronic publishing platform or system.

- A repurposing or aggregation of previously published content.

- An "open archive initiative" or an "open access solution."

Portico Assumes Archiving Requires

- A trusted archival partner with an appropriate:
  - Mission: Preservation should be mission-central.
  - Economic model: Long-term sustainability is best secured through diverse funding sources.
  - Technological infrastructure: Technology must support unique preservation functions and be updated as technology evolves.
  - Relationships with libraries and publishers: Both parties have preservation needs and will benefit from an archival service.

- Permission and content from publishers.

- Adoption and ongoing watch of preservation and publishing standards, best practices, and format evolution with action taken well in advance of technology or format obsolescence.

Portico's Approach to E-Journal Archiving

- Publishers deliver to Portico the "source files" of electronic journals (SGML, XML, PDF, etc).

- Portico converts the files from their original proprietary format to an archival format based on the NLM Archival DTD and deposits the content in the Portico repository.

- Portico retains the source files for the long term; the normalized files will be migrated as needed to new formats.

- Portico preserves the intellectual content of the journal, including the text, images, and limited functionality such as internal linking. "Look and feel" and publishers' value-add features are not preserved.

Portico Archive Service & Access Model

- Assumptions:
  - Material is preserved for eventual use and access. A completely and perpetually "dark" archive is not desirable.

  - Access to audit or verify the integrity of archived content is needed.

  - Under certain conditions, broad access to archived content may be appropriate, and an archive model must articulate these.

  - Access to archived content should not compete with publisher-provided access or threaten publisher revenues.

  - Access model should balance the needs of both publisher and library communities.

Portico Archive Service & Access Model

- For participating libraries, trigger events initiate campus-wide access. Trigger events include:

  - When a publisher ceases operations and no entity purchases and makes titles accessible

  - When a publisher ceases to publish a title and it is not offered by another publisher

  - When back issues are removed from a publisher's site and not available elsewhere

  - Upon catastrophic failure by publisher delivery platform for a sustained period of time

  - When a publisher chooses to rely upon Portico to meet perpetual access obligations.

- Pre-trigger event, select librarians at participating libraries are granted password-controlled access for verification purposes.

Publisher Participation Requirements

- Sign an archiving license.

- At publisher's option, permit Portico to provide post-cancellation "perpetual access" to Portico supporting libraries on behalf of publisher in conformance with their customer agreements.

- Deposit content in a timely way following publication.

- Make an annual financial contribution.

Benefits to Publishers

- Reduces (or eliminates) publisher's internal archiving costs.

- Meets library demand for a trusted, third-party archive.

- Meets library demand for perpetual access without negative impact on publisher's operations.

- Converts source files to archival format and conducts future format migrations. Provides information on evolving formats and archival practices and technologies.

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Library Participation Requirements

- Sign an archiving license.

- Make a one-time and annual financial contribution.

Benefits to Libraries

- Creates a means to act upon the traditional preservation mandate.

- Secures protection against eventual loss of access. Provides a practical way to secure perpetual access and maintain continuity of library collections.

- Reduces system-wide preservation costs through a cooperatively developed preservation infrastructure which eliminates the need for each library to independently archive published literature.

- Enables libraries to more aggressively rely upon electronic-resources and reduce their expenditures on the processing, housing, and preservation of print resources.

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Sustainability

- Diversified revenue streams are important to the longevity of the archive. Support for the archive comes from the primary beneficiaries of the archive - publishers and libraries.

- Government agencies and charitable foundations are also expected to provide support.

- The Andrew W. Mellon Foundation, Ithaka, JSTOR and the Library of Congress are investing significantly in Portico's infrastructure development.

Sustainability

- Publisher Contribution
  - An annual Supporting Publisher Contribution to fund initial conversion tools development and to defray the cost of adding new content as it is published.
  - Contributions will be tiered and vary according to the size of the publisher's annual journals revenue (subscription and advertising)

- Library Contributions
  - A one-time Archive Development Contribution to fund infrastructure development and to prepare for future migrations.
  - An annual Archive Support Contribution to defray the cost of adding new content as it is published.

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