APPENDIX A: PRESERVATION BUSINESS MODEL

2010-2013 Strategic Plan
Educopia Institute

2010-05-03

Summary
The Educopia Institute fosters collaborative activities between libraries, museums, and other cultural memory organizations to advance the production, dissemination, and preservation of digital scholarship and scholarly resources. Established in 2006, the Educopia Institute currently hosts two programs: Educopia Consulting, which works to develop sustainable business models for collaborative work to advance digital access and preservation, and the MetaArchive Cooperative, a distributed digital preservation network that ensures that today's cultural record will be available to tomorrow's scholars, researchers, and citizens.

The following 2010-2013 Strategic Plan highlights the Educopia Institute’s Strengths and Achievements to Date and details the Strategic Planning Process. Specifically this Strategic Plan declares Educopia Institute’s:

- Mission Statement;
- Vision;
- Three Critical Challenges; and
- Six Programmatic Goals (with Objectives & Strategies)

Strengths and Achievements to Date
The core strength of the Educopia Institute’s approach comes precisely from its decentralized goal of fostering the creation of successful cyberinfrastructure elements in the cultural memory community, rather than through a process of accumulating assets of its own. This approach builds knowledge and resources in the extended community of beneficiaries whom the Institute assists.

To date, the Educopia Institute has positioned itself for sustainable growth and success in its programs by:

1. Maintaining a lightweight and flexible administrative structure that enables the Institute to provide low-cost coordination services to cultural memory organizations;
2. Establishing a diversified revenue stream that allows the Institute to ensure the future growth and sustainability of its first hosted program, the MetaArchive Cooperative;
3. Producing a viable organizational model to support distributed digital preservation activities.
4. Engaging new institutions in its work, both through recruiting new institutions for MetaArchive (10 beyond the foundational membership) and through building partnerships with external groups (NDLTD, Chronopolis);
5. Publishing the first of a series of volumes describing successful collaborative strategies and articulating specific new models to help cultural memory organizations work together for their mutual benefit (A Guide to Distributed Digital Preservation); and

6. Delivering presentation and hosting numerous workshops and consulting sessions to reach a broad audience with interest in distributed digital preservation and other collaboratively driven cultural memory organization activities.

**Strategic Planning Process**

To further the sustainability and growth of the Educopia Institute and its programs, it has engaged in a strategic planning process. The goal of this strategic planning is to find the best alignment between Educopia and its environment, to identify where Educopia may best focus its programmatic efforts, and to outline what it wants to achieve and how this will be accomplished.
2010-2013 Strategic Plan

This Strategic Plan provides the Educopia Institute’s Mission Statement, Vision, Critical Challenges and defines the Programmatic Goals, Objectives and Strategies it will pursue to address these challenges for the three-year period of 2010-2013.

Mission Statement

“The Educopia Institute serves and advances the well-being of libraries, information/research centers, and their parent institutions by catalyzing the advancement of shared information systems and infrastructures.”

Vision

“Cultural memory organizations will have shared information systems and infrastructure to advance scholarly communication.”

Critical Challenges

Educopia Institute identified the following three critical challenges that it will face over the next three years:

- The need to accommodate programmatic growth and avoid organizational memory loss;
- The need to grow programs/projects and funding without losing the core strengths (lean and decentralized infrastructure; collaborative approaches);
- The need to expand credibility among opinion leaders and decision-makers (branding).

Programmatic Goals

The following six Programmatic Goals were defined to address the identified Critical Challenges. Each goal is outlined below under its programmatic area of focus with corresponding Objectives, and Strategies.

Goal 1: Diversify and expand funding for core operations and new initiatives

<table>
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<tr>
<th>Objectives:</th>
<th>Strategies:</th>
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<tr>
<td>Create a stable non-membership based revenue stream for the organization</td>
<td>Found Educopia Consulting and cultivate clients throughout the digital memory sector</td>
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<td>Continue to identify and cultivate at least two government funding opportunities.</td>
<td>Secure grant award related to tool development</td>
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<td>Secure grant award related to development of a portal cooperative. (Note: See strategies for Goals 5 and 6 below.)</td>
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Goal 2: Develop staff capacity and build administrative infrastructure

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<th>Objectives:</th>
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<tr>
<td>Implement training opportunities for staff to help them adapt to administrative and technical needs</td>
<td>Send each staff member to at least one appropriate conference each year</td>
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<td>Build institutional memory and expertise to</td>
<td>Encourage staff to present at conferences.</td>
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<td></td>
<td>Work with staff to build a training video series for distributed digital preservation</td>
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<td>Set documentation priorities and ensure</td>
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Goal 3: Build recognition of Educopia Institute and its programs among potential partners and member organizations

Objectives: Engage in at least 12 outreach activities through presentations, workshops and consulting to cultural memory organizations.

Strategies: Present to audiences comprised of librarians, archivists, curators. Produce at least one event each year on digital preservation.

Goal 4: Cultivate the practice of distributed digital preservation among digital memory organizations

Objectives: Host one international conference on distributed digital preservation.

Strategies: Work with likeminded institutional groups (LC, DCC, etc) to identify and plan toward conferences. Distribute via listservs, newsletters, our website, and personal emails. Host a forum for PLNs developing tools for DDP. Establish and feed a listserv for PLNs. Explore co-development opportunities with DataPASS and LOCKSS-KOPAL.

Goal 5: Identifying potential programmatic areas to advance the production of scholarship and access.

Objectives: Explore the creation of a portal development cooperative.

Strategies: Convene a meeting with interested parties on creating a portal development cooperative. Seek funding opportunities to support this effort. (Note: See Strategy under Goal 2).

Goal 6: Ensuring the continued vitality of the MetaArchive Cooperative.

Objectives: Expand subject/genre based digital archives to at least three distinctive foci.

Strategies: Apply for funding to explore data models for e-records and newspaper management. Involve the Content Committee in setting pathway for new archive establishment.
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<tr>
<th>Increase membership by 12 additional institutions (over 3 years)</th>
<th>Present at conferences and workshops about MetaArchive’s work.</th>
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<td>Establish a second preservation service designed in the hub-and-spoke model.</td>
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<td>Integrate additional tools to support network functioning (e.g. JHOVE2, Network Testing, Format Migration and Reporting on Formats, Technical Bridge).</td>
<td>Seek partnerships and funding dedicated to tools development.</td>
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<tr>
<td>Provide ongoing community building, training, development and networking among new and existing MetaArchive Cooperative members.</td>
<td>Conduct annual meeting of MetaArchive Cooperative Steering Committee</td>
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<td>Continue information sharing via Wiki, Listservs, etc.</td>
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<td>Conduct annual workshop/technical orientation for new MetaArchive Members.</td>
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**Notes on this document**
This document was drafted by Martin Halbert, Katherine Skinner, Matt Schultz, and Julie Michaelson in 2010-02, finalized by Katherine Skinner in 2010-5, and reviewed and approved by the Educopia Board of Directors and the MetaArchive Steering Committee in Winter 2011.
Summary

This document describes the operations of the Educopia Institute and its two current programs: Educopia Consulting and the MetaArchive Cooperative. The document includes information regarding Educopia's organizational structure, day-to-day workflows, and how we monitor and control the quality of our services.

About the Educopia Institute

The Educopia Institute acts as a catalyst that assists and advises libraries and other cultural memory institutions in the creation, dissemination, and preservation of new digital forms of scholarly communication. The strength of the Institute’s approach comes precisely from its decentralized goal of fostering the creation of successful cyberinfrastructure elements in the community, rather than through building a centralized infrastructure that it must then maintain on behalf of the community. This approach differs substantially from the more common model, in which third-party service providers sell products to libraries. Instead of creating and selling products, Educopia helps the cultural memory community to build its own knowledge, resources, and infrastructure. This approach ensures that cultural memory organizations maintain active roles in acquiring, providing access to, and preserving content in the new digital environment. It also ensures that Educopia maintains a lightweight administrative structure with a low overhead and great flexibility.

Educopia achieves its Mission by:

1. Providing organizational support for collaborative and cooperative digital programs in educational institutions, including libraries, archives and museums.

2. Offering advising services, conducting research, and sharing results through consulting activities for libraries and other cultural memory organizations.

3. Producing publications and hosting symposia, seminar, and workshop activities.

4. Coordinating library services to catalyze cross-institutional projects with academic and cultural institutions, applying for grants on their behalf, and administering such grants when awarded.

About Educopia’s Programs

The Educopia Institute explicitly addresses the transition that cultural memory organizations are making from curating physical collections to curating a mix of physical and digital collections. The decisions that libraries and other cultural memory organizations make regarding the curation of their collections during this paradigm shift has great implications for the future of the field. In particular, decisions regarding what activities cultural memory organizations undertake locally and what activities they will outsource to
third-party service providers will help to shape the roles of the digital curation field as it continues to emerge.

Most cultural memory organizations use some third-party services as they conduct their work (usually for the purpose of saving staff time and/or money). Where core missions are concerned (e.g., acquisition, dissemination, and preservation), the Educopia Institute encourages cultural memory organizations to instead work collaboratively with each other wherever possible in order to achieve these same goals. In the digital arena, collaboration enables institutions to maintain an active curatorial role while creating and capitalizing on a cost-effective shared “cyberinfrastructure”.

By collaborating, rather than outsourcing, to fulfill key missions, cultural memory organizations benefit in many ways, including:

1. They build the digital infrastructure according to curatorial principles and open standards (as opposed to advising third-party groups on curatorial principles only to find that the solutions they build are “black box” solutions that they are not allowed to understand).

2. They build and share knowledge of how a solution actually works and thus also build their own power to enact it, assess it, and modify it for themselves,

3. They (and their materials) are not subject to the rising prices that even the best of third-party service providers will charge in order to maximize their financial gain.

The Educopia Institute currently hosts two programs, Educopia Consulting and the MetaArchive Cooperative to address these issues in partnership with cultural memory organizations.

**Educopia Consulting**

Educopia Consulting seeks to empower cultural memory organizations by working to help them develop their own sustainable business models to advance digital access and preservation.

To that end, the staff of the Educopia Institute regularly engages in a range of Advising Services. These include:

1. Hosting conferences, workshops, and other events on collaborative approaches to the creation, dissemination, and preservation of digital content;

2. Providing consulting services to help institutions create and sustain their own robust digital infrastructures;

3. Producing publications that document successful collaborative strategies and articulate specific new models that cultural memory organizations may use as they work together for their mutual benefit.

**The MetaArchive Cooperative**

The MetaArchive Cooperative is an independent, international membership association that provides collaborative and distributed digital preservation solutions for cultural memory organizations, including university libraries, government and historical research archives, museums, and other similar institutions (www.metaarchive.org). The central missions of the MetaArchive Cooperative are to support, promote, and extend the practice of distributed digital preservation; to serve as a catalyst and guide for other collaborative groups that seek to implement the distributed digital preservation methods it has developed; and to educate cultural memory organizations about distributed digital preservation.
To these ends, the Cooperative offers several important services to a wide range of cultural memory organizations. These include:

1. Trustworthy distributed digital preservation services, including data management and distributed storage for the secure preservation of multi-format collections of digital objects; and

2. Training opportunities facilitated by MetaArchive staff and members for groups/individuals interested in distributed digital preservation methods

The purpose of the MetaArchive Cooperative is to bring organizations together to jointly create what they cannot accomplish alone: affordable distributed digital preservation services. The methods we engage to preserve our digital files differ substantially from the processes university libraries, government and historical research archives, museums, and other similar institutions have used to preserve physical collections. What has not changed is our commitment to our central goal: to ensure that our collections will remain available and usable for future scholars, researchers, and citizens.

**Stage of Development**

The Educopia Institute is a 501(c)(3) organization founded to serve and advance the wellbeing of libraries, research centers, and museums by catalyzing the advancement of shared information systems and infrastructures. At the time of its founding in 2006, it became the program host for the MetaArchive Cooperative; it added a second program, Educopia Consulting, in 2009.

In 2004, the MetaArchive Cooperative began as a project undertaken by a team of six academic research libraries and the Library of Congress to research, develop, and implement an organizational infrastructure and technical service for distributed digital preservation. Following the success of this initial endeavor, the initiative sought to transition to a more sustainable infrastructure. In 2006, it moved from its project base, an academic library, and became an independent, unincorporated, international membership association under the organizational direction of The Educopia Institute. Since that time, the MetaArchive Cooperative has grown to include 17 institutions, including two international members.

In September 2009, the Institute hired a small staff to host and manage the core infrastructure and services necessary to ensure the sustainability of the MetaArchive Cooperative and to plan future Educopia initiatives. This central staff and the administrative apparatus now in place to support them enable effective and efficient servicing (coordinating activities, managing finances, etc.) of Educopia’s programs and projects.

Founded in 2009, Educopia Consulting is the newest program sponsored by the Institute and was established to provide consulting to cultural memory organizations as they create and/or assess their technical infrastructures; hosting of events (conferences, workshops, meetings) that seek to foster collaborative activities between cultural memory organizations; and the production of publications on the roles of collaboration in cyberinfrastructure development.
Services Overview

The Educopia Institute's programs offer the following services to a wide range of cultural memory organizations:

Educopia Consulting

1. Regularly delivering presentations and hosting workshops and consulting sessions to reach a broad audience with interest in distributed digital preservation and other collaboratively driven cultural memory organization activities.

In keeping with the Educopia Institute’s mission and vision to serve the broader cultural memory community, Educopia Consulting was established to provide advising services and training related to the use of collaborative infrastructures to support core library missions in the digital environment.

Educopia Consulting seeks to channel the knowledge, professional experience and expertise of its staff and its program partners to serve cultural memory organizations. Since December 2009, Educopia Consulting has worked with groups that include Indiana State University, University of North Texas, New Orleans Jazz and Heritage Foundation, the Folger Shakespeare Library, the University of North Carolina, the University of Minnesota, the Minnesota Historical Society, and HathiTrust. It has advised these and other groups on a broad range of topics, including digital preservation planning, policymaking, and implementation; creating a sustainable organizational infrastructure to support collaborative networks; fostering scholarly innovation in the digital humanities and social sciences; and implementing sustainable eRecords management practices and workflows for small archives. Educopia Consulting has also worked with Lyrasis, NEDCC, BCR, and other groups to provide workshop training and presentations on digital preservation planning and implementation. Educopia Consulting provides an additional source of funding that can be used when necessary to underwrite programmatic costs for the MetaArchive Cooperative and future programs of the Institute. The service is regularly promoted at conferences and professional meetings and through the Educopia Institute’s website.

2. Producing and promoting publications describing successful collaborative strategies and articulating specific new models to help cultural memory organizations work together for their mutual benefit.

Educopia Consulting also integrates the knowledge, professional experience and expertise of its staff and program partners through publishing scholarly and technical literature that advances the development and use of shared cyberinfrastructure to support collaborative scholarly creation, preservation, and dissemination of digital content.

The program’s first publication, *A Guide to Distributed Digital Preservation*, was launched in February 2010 and reached a readership of over 1,000 within the first month of publication. The *Guide* is the first of a series of volumes that will be published describing successful collaborative strategies and articulating specific new models that may help cultural memory organizations work together for their mutual benefit. The second volume, *Aligning National Approaches to Digital Preservation* will be published in Fall 2011.
The MetaArchive Cooperative

1. Distributed preservation for multi-format collections of digital objects.

The Cooperative provides its members with preservation services via a decentralized, geographically dispersed organizational and technical framework. This framework was designed to mobilize group efforts between cooperating organizations that seek to actively preserve their digital collections. The MetaArchive Cooperative does not have a single location of operation; nor does it control production of its services in a centralized way. Instead, member organizations contribute to the service by hosting secure servers (known as MetaArchive-LOCKSS caches) in their own organizational settings. The individual members, then, comprise the operation in a decentralized fashion. The MetaArchive Cooperative itself also has no central operating location, nor does it own equipment or other assets. The success of the Cooperative depends on member organizations working together to invest in their own infrastructures and capabilities.

The MetaArchive Cooperative runs a network of “dark archives” (i.e., no access is provided to non-authorized individuals to the network’s contents) that is dispersed across its member organizations. This network performs data management and preservation services in a distributed manner for its member institutions. The open source LOCKSS (http://lockss.org) software, developed by Stanford University, serves as the foundation for MetaArchive’s distributed technical system.

The MetaArchive Cooperative’s network is comprised of content provider sites whose content is ingested and preserved by MetaArchive-LOCKSS caches, or servers that participate in the network. These MetaArchive-LOCKSS caches are administered by MetaArchive’s member organizations that contract with the Cooperative to preserve this content in a collaborative, distributed manner. The technical framework provides a systematic way for these MetaArchive-LOCKSS caches to constantly check in with one another for signs of file degradation or “bit rot,” as well as for a cache’s corruption or disappearance due to technical or physical catastrophe. If a problem with a file/cache is detected, the other MetaArchive-LOCKSS caches conduct a “poll” to determine which copy has been compromised. Once they reach quorum, the software can repair that damaged copy. Similarly, if an entire MetaArchive-LOCKSS cache experiences technical failure and withdraws/disappears from the network, the cache can be safely recreated via the other caches in the network.

Each of the network’s MetaArchive-LOCKSS caches is under separate administrative control, which guards both against natural/technical disaster and the threat of economic failure of any one cache. Any cache in the system can drop out — whether intentionally or due to technical or organizational failures — without jeopardizing either the network or its contents. Myriad testing scenarios have consistently demonstrated the stability of this preservation system’s technical infrastructure.

The Cooperative welcomes participation at two distinct membership levels relative to the goals and preservation needs of members. All membership terms are for three-year periods. The Cooperative also works with and recognizes a range of affiliate organizations. The levels, costs (as of August 2010), and responsibilities for each membership tier are as follows:

A. Sustaining Members are integral to the research, development, and deployment work of the MetaArchive Cooperative and contribute their internal staff and resources to the effort. They maintain a MetaArchive-LOCKSS cache and also work directly on programming and network testing tasks. Each of the first 15 Sustaining Members also have a representative from their organization serve on the MetaArchive Steering Committee. The fee for joining as a Sustaining Member is $5,000/year for a three-year period (or $12,000 if three year membership paid in full).
B. **Preservation Members** engage in ongoing preservation activities and actively participate in the network. They maintain a MetaArchive-LOCKSS cache and make that cache available for testing purposes. The fee for joining as a Preservation Member is $1,000/year for a three-year period.

**MetaArchive Affiliates** are those organizations, consortia, and collaborative groups that we have advised and/or that have collaborated with us on distributed digital preservation topics.

2. **Training opportunities facilitated by MetaArchive staff or members for groups/individuals interested in distributed digital preservation methods**

As the Cooperative’s mission states, we are committed both to growing our own network and advancing other distributed digital preservation networks. To these ends, the Cooperative administers workshops for diverse groups, including individual organizations that are interested in joining MetaArchive or other digital preservation networks as well as groups of organizations or consortia that are contemplating starting their own private LOCKSS networks utilizing the organizational and technical framework that we have built. In the first half of 2010 alone, the MetaArchive has delivered nine presentations and hosted one workshop. In October 2010, the MetaArchive Cooperative will host a meeting for all existing PLNs in Boston, MA, as a community-building initiative that seeks to foster better communication and partnership between PLNs.

**Expansion Plans**

**Educopia Institute**

Educopia is exploring additional programs that address the creation, access, and re-use of digital materials through shared cyberinfrastructures and institutional collaborations, perhaps through the development of jointly managed and curated scholarly portals.

**Educopia Consulting**

Educopia Consulting has committed to engaging in at least 12 major outreach activities with cultural memory organizations over the course of the next three years, including presentations, workshops and individual consulting initiatives. In addition, the Educopia Institute will produce at least one major event each year geared toward digital preservation and will host at least one international conference over the next three years focused specifically on collaborative approaches to preservation (e.g., the 2010 PLN meeting and a 2011 meeting, “Aligning National Approaches to Digital Preservation” in Tallinn, Estonia).

In the course of presenting to audiences comprised of librarians, archivists, curators, the staff and program partners involved with Educopia Consulting will actively seek further opportunities to provide in-depth training and focused attention to cultural memory organizations to help improve their capacity to create, provide access to, and preserve digital collections.

**The MetaArchive Cooperative**

As of August 2010, the MetaArchive Cooperative is comprised of 17 institutions, and we are currently working with numerous organizations that intend to join us at various membership levels in the coming year. To date, the Cooperative has extended membership opportunities only to individual institutions. We are exploring the possibility of adding a new membership category to include collaborative groups. In this scenario, the “Member” would be the collaborative’s central organization, not the individual institutions that participate in that collaborative. That “Member” would act as all other members do,
including hosting and maintaining a MetaArchive-LOCKSS cache for the network and writing plugins for its jointly maintained collection(s). Finally, the Program Manager is currently in conversation with a dozen or more additional institutions that have contacted us with an interest in membership.

Our network is actively preserving more than 140 collections for a cumulative content of 26+ TBs of data and approximately doubles in size each year. There are two central ways in which we continue to increase our storage capacity and our geographic distribution within our network.

1. Each time that the Cooperative adds a new Member, it also adds a new MetaArchive-LOCKSS cache to the network (as of August 2010, each cache is 16 TB).

2. Whenever a Sustaining, or Preservation Member contributes more material than their initial space allotment allows (Sustaining: 40 GB; Preservation: 20 GB) they pay a per-GB rate to cover the additional storage space required to ingest and distribute this content throughout the network (currently $2/GB/3-year term). This fee is used by the Cooperative to cover administrative costs associated with the central management of the network and to purchase additional GB of storage for the network as needed. This additional storage space (in the form of new disks or servers) is then allocated to at least six\(^1\) preservation caches in the network.

**Suppliers, Risks, and Alternative Arrangements**

**Educopia Institute**

The Educopia Institute, as the administrative apparatus for the MetaArchive Cooperative, Educopia Consulting, and any future programs, takes a very lightweight and distributed approach to its infrastructure. Staff members are not collocated in a single office, but rather work in decentralized locations and stay in close contact through videoconferencing, email, and phone. This enables the Institute to avoid the overhead and expense of a central office space, which dramatically reduces supply and maintenance costs for the business. In addition, key pieces of the administrative technical infrastructure have been situated in the Amazon Cloud, so as to reduce technology dependencies on any single point of failure across its collaborating member institutions.

The Educopia Institute has experienced quality service from its contracted accounting and health benefit providers and annually evaluates the quality of these services with its Board of Directors. As with any business, staff costs are the highest expenditure, and the Executive Director has been working to streamline the activities of each of its programs to better target expertise and reduce the amount of effort required to accomplish core activities.

The long-term viability of the Educopia Institute depends largely upon its success in encouraging cultural memory organizations to adopt shared cyberinfrastructures and collaborative activities that center on the creation, preservation, and dissemination of scholarly digital assets. Short-term progress will be determined by the degree to which Educopia and its staff can strategically facilitate these activities within its existing programs and demonstrate to its stakeholders the practical benefits and cost effectiveness of this unique approach. This will serve as a sound foundation for catalyzing growth across the cultural memory community more broadly.

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1 Six is the minimum number of caches in a MetaArchive network that host any given file/collection that is submitted for ingest and preservation. The Cooperative actually has a seventh copy of all content through an arrangement with the Library of Congress, which currently ingests and preserves all MetaArchive-based content on a node in Washington D.C.
Collaborative partnerships across cultural memory organizations are sometimes viewed as risky for reasons related to shared investments, free-riders, and intellectual property liabilities. Educopia must consistently make the case that such collaborations are sound investments, particularly in contrast to institutions turning their stewardship over to third-party service providers (in effect, abdicating some control over their digital assets in the process).

Educopia also seeks to educate cultural memory organizations about the costs of preservation. The trend today in current digital library reports and other publications is to talk about preservation as a prohibitively costly and complicated activity. This has already left many institutions wondering if they should turn to third-party service providers as outside experts who can take on this burdensome activity on their behalf. More than a decade of outsourcing has shown that costs for vendor services are consistently rising for cultural memory institutions, and many of the current third-party arrangements trap even open access documents behind toll walls. Through its programs, Educopia will continue to demonstrate alternatives to these assumptions and unappealing trends.

**Educopia Consulting**

Educopia Consulting relies primarily upon the expertise of the current Educopia Institute central staff that has extensive and growing backgrounds in information systems, academia, digital libraries and archives, and multi-institutional collaboration in cultural memory projects. Educopia Consulting also maintains a broad and growing network of contacts with professionals in fields such as digital preservation planning, networking technology, non-profit administration, copyright law and intellectual property, and many others. This network grows with each new institution that joins MetaArchive and/or with whom the Educopia Institute develops an affiliation.

The importance of pursuing collaboration in digital preservation and information infrastructures is becoming more and more clear to cultural memory organizations, thanks primarily to the success of the National Digital Information Infrastructure and Preservation Program (NDIIPP). NDIIPP’s successor program the National Digital Stewardship Alliance (NDSA) will promote new levels of collaboration across the landscape of cultural memory organizations through facilitating mutually developed training materials, workshops, policy and standards initiatives, and projects. Educopia Consulting is uniquely positioned as a founding member of the NDSA and is already actively engaged in this work as part of the Digital Preservation Outreach and Education (DPOE) Committee.

A number of consulting groups already exist with highly developed programs in areas such as digital preservation planning and digital asset management (e.g., Lyrasis, OCLC, NEDCC). Educopia Institute acknowledges that it is advancing into increasingly competitive territory in terms of its consulting efforts. However, due to our extensive experience with growing collaborative projects and encouraging cultural memory organizations to build their own shared infrastructures and services, Educopia Consulting clearly distinguishes itself when it is approaching the cultural memory community at large, and feels confident that it offers an alternative, fresh, and welcome perspective.

Educopia will annually solicit feedback from the cultural memory community of libraries, archives, museums and other institutions to better understand and address their needs. Educopia Consulting will also seek to foster international collaborations in the near future, beginning with the hosting of the Aligning National Approaches to Digital Preservation conference in Estonia in May 2011, and the publication of an edited volume by that title in Spring 2012.

**The MetaArchive Cooperative**

As a decentralized business, the MetaArchive Cooperative only has two forms of supplies: software and servers. Because our infrastructure is not server-specific, there is no central vendor to whom we
turn for our servers—each organization may choose to purchase a server that corresponds to the
network’s Technical Specifications (documented in Appendix A of the Cooperative Charter and
updated annually) from any vendor.

The MetaArchive Cooperative does, however, rely on its organizational members to provide the
MetaArchive-LOCKSS caches that comprise the preservation network. In order to ensure the quality of
our preservation services, the Cooperative demands that every file stored in the network is replicated
across at least six distinct caches. This means that the network ideally must include at least six
Sustaining and/or Preservation Members. In order to ensure that our network stays stable, we accept
members in three-year terms and request that they provide us with a 90-day notice of renewal or
resignation at the end of their membership terms. This provides us with a measure of insurance that we
will be able to recruit a replacement member for any outgoing member prior to that outgoing member’s
departure from the network.

In the unlikely case that our membership ever drops below this threshold, one or more organizations
may bring up a second server as a temporary solution in order to satisfy the minimum number of
caches required until a new member is recruited and in place.

MetaArchive also depends upon its Sustaining Members to provide the technical support needed to
keep the decentralized business structure going. Although we have built upon the sound foundation of
an open-source software package—LOCKSS—with a vibrant and growing user community, we do
need technical staff members within the MetaArchive Cooperative’s membership who can provide
ongoing maintenance and support for the network. To that end, our Sustaining Members agree to
dedicate a portion of their technical staff time to support the MetaArchive Cooperative. If at any point
this donated staff time from our Sustaining Members does not satisfy the needs of the Cooperative, the
Steering Committee has the option to allocate funds from the Cooperative’s membership fees to pay for
staff or consultants to assist with technical duties.

Industry Standards and Compliance

The MetaArchive Cooperative

The growing industry of preservation services will soon enjoy regulatory bodies that will certify specific
businesses as compliant with the standards of our industry. To date, no such bodies exist, but there are
several national and international guidelines emerging. To ensure the quality of the services we provide
to our member organizations, the MetaArchive Cooperative is actively engaged with these emerging
guidelines and works to fulfill the terms they provide.

The Cooperative was audited in 2007 by the NEDCC Digital Preservation Readiness Assessment
team. This group was funded by the Institute for Museum and Library Services (IMLS) in 2006-2007 to
develop and test an assessment tool for digital preservation readiness. The team completed their
assessment of the MetaArchive Cooperative in March 2007, and the Cooperative is compliant with the
recommendations that this group provided to us.

In 2009 the Cooperative was audited using the Trustworthy Repositories Audit and Certification (TRAC)
Criteria and Checklist developed by the RLG-NARA Digital Repository Certification Task Force (see
http://www.crl.edu/sites/default/files/attachments/pages/trac_0.pdf). An external consultant found that
the Cooperative conforms to all 84 TRAC-based criteria. The checklist results of that audit can be
obtained on the Resources page of the MetaArchive’s public website (www.metaarchive.org).
Quality Control Measures

Educopia Institute

The President and the Executive Director of the Educopia Institute in their routine governance and pursuit of strategic planning goals and objectives for this non-profit host institution are subject to annual and semi-annual review and approval by the Board of Directors.

Each Educopia Institute staff member is subject to six-month evaluation for job performance and is regularly monitored for adherence to job requirements as set forth in the Educopia Institute Handbook provided at time of hire. To ensure quality performance each staff member is sent to one major professional conference or workshop per year to improve knowledge and skills relevant to job duties.

Educopia Consulting

To ensure the quality of Educopia Consulting services, we regularly solicit evaluative feedback from participants in our on-site presentations and workshops, invite reviews by project/program managers when we serve on Advisory Boards for projects and programs that are establishing Private LOCKSS Networks or other collaborative programs; and seek feedback via evaluative tools when we provide systematic guidance to various groups and institutions. We use this feedback to improve our services.

The MetaArchive Cooperative

For our preservation services, we provide quality control through 1) actively soliciting weekly, monthly and annual feedback from the MetaArchive Steering Committee; 2) constant monitoring of the MetaArchive-LOCKSS caches, 3) regular network testing, including disaster and contingency planning; and 4) planning new development activities intended to enrich our Cooperative services.

For MetaArchive sponsored and administered events, we ensure quality by conducting careful assessments of our workshops via pre- and post-event evaluations and making any necessary adjustments. For other training endeavors, including our documentation and the book A Guide to Distributed Digital Preservation (published in February 2010), we engage peer review strategies, including administering “public comment” periods when appropriate.

Notes on this document

An early version of this document that focused just on the MetaArchive Cooperative was drafted by Katherine Skinner and approved by the Steering Committee on 2008-03-08. It was reworked to include information about Educopia Institute and its programs by Matt Schultz and Katherine Skinner in Winter 2010 and was reviewed and approved by the Educopia Board of Directors and the MetaArchive Cooperative Steering Committee in Winter 2011.
Summary

This document describes the management plan for the Educopia Institute and its two programs: MetaArchive Cooperative and Educopia Consulting. The document focuses primarily on information regarding the organizational structure, internal and external management resources, and staff resources for the Educopia Institute.

Educopia Structure

The Educopia Institute is incorporated under the laws of Georgia and is a 501c3 non-profit organization that serves as a coordinating and catalytic entity for leaders from university libraries, government and historical research archives, museums, and other similar institutions. Educopia’s primary activities include providing organizational support for collaborative and cooperative digital programs, offering consulting services, conducting research, producing publications, hosting events, and assisting cultural institutions with applying for and administering grants. It is served internally by a central administrative and technical staff and overseen externally by a Board of Directors. This Board provides oversight and fiduciary responsibility for the Educopia Institute.

To date, the Educopia Institute has primarily provided administrative and technical services for the MetaArchive Cooperative, including: facilitating communications and cooperation between the MetaArchive Cooperative’s member organizations; overseeing the technical development and management of the preservation network; processing and distributing membership fees; organizing educational symposia, seminars, and workshop programs on distributed digital preservation; administering annual Steering Committee meetings; and applying for funding from government, foundation, corporate, and individual sources on behalf of its membership in order to forward the mission of the MetaArchive Cooperative.

To further diversify Educopia’s revenue streams and to advance its overall mission, the Educopia Institute established Educopia Consulting in 2009. This program offers advising services to cultural institutions on a variety of topics related to the creation, dissemination, and preservation of scholarly information in digital forms. It also hosts events and produces publications on the topic of advancing collaborative cyberinfrastructure development by libraries and other cultural memory organizations.

Educopia Internal Management Team

The Educopia Institute maintains a low overhead for its operations by distributing work across its programs’ membership whenever this is possible. This also advances Educopia’s goal to build infrastructure within, not just for cultural memory organizations.
To date, the operating expenses of the Educopia Institute have been largely funded through two revenue sources: 1) grants and contracts and 2) membership and space fees generated through the MetaArchive Cooperative.¹

From 2006-2009, the Educopia Institute was staffed by a volunteer, non-paid Executive Director position. The MetaArchive Cooperative’s three full-time employees were hosted through one of its member institutions and funded through grant and contract funds.

Beginning in October 2009, the Educopia Institute began hosting staff members, beginning with a full-time Executive Director and expanding to include two full-time and one half-time staff positions in January 2010 to support the work of the MetaArchive Cooperative program. Current grant and contract funding streams will continue to support these positions through at least 2011. Our sustainability plans ensure that the central positions supporting the Cooperative’s work will be funded through a combination of membership revenues and consulting revenues by 2013, and that future grant- and contract-based funding will be used for temporary positions and new development activities.

We intend to keep the organizational infrastructure of the Educopia Institute lightweight believing that sustainability depends on a distributed framework and the continued commitment of our programs’ members, not on hosting a sizable central staff. To that end, ongoing programmatic duties for the MetaArchive Cooperative have been intentionally structured such that they may be distributed across its member organizations’ staff and faculty. Each Member of the Cooperative allocs a portion of both technical and non-technical staff time to the work associated with maintaining the MetaArchive network. These shared management resources figure prominently in the MetaArchive Cooperative’s workflow, and will be covered in more detail in the next section.

All of the following individuals and roles serve as pro bono volunteers and do not receive any payment for time spent working on either the Educopia institute, or the MetaArchive Cooperative: the President of the Educopia Institute, the Treasurer of the Educopia Institute, the voting members of the Board of Directors for the Educopia Institute, and the Steering Committee members of the MetaArchive Cooperative.

Key internal management resources and the roles they play in Educopia’s organizational infrastructure are as follows:

**Administration**

- Martin Halbert, President of the Educopia Institute and Chair of the Steering Committee of the MetaArchive Cooperative
- Katherine Skinner, Executive Director of the Educopia Institute and Program Manager of the MetaArchive Cooperative

**Production**

- Monika Mevenkamp, Software Engineer, Sr. of the Educopia Institute for the MetaArchive Cooperative

¹ Membership dues are used to administer the Cooperative, host meetings, purchase additional servers for member organizations on an as-needed basis, replace member organizations’ servers in case of catastrophic events, cover travel expenses for MetaArchive representatives as they make presentations about the Cooperative, and, when necessary, to fund consultants to conduct work for the Cooperative. For more information, please see the Cooperative Charter, [http://metaarchive.org/resources](http://metaarchive.org/resources).
Bill Robbins, System Administrator of the Educopia Institute for the MetaArchive Cooperative

Matt Schultz, Collaborative Services Librarian of the Educopia Institute for the MetaArchive Cooperative

**Membership Services and Marketing**

Martin Halbert, President of the Educopia Institute and Chair of the Steering Committee of the MetaArchive Cooperative

Katherine Skinner, Executive Director of the Educopia Institute and Program Manager of the MetaArchive Cooperative

Matt Schultz, Collaborative Services Librarian of the Educopia Institute for the MetaArchive Cooperative

**Educopia External Management Resources**

As a lightweight administrative organization, the external resources of the Educopia Institute figure prominently in our operations and management activities. Our primary external management resources include 1) the Board of Directors for the Educopia Institute; and 2) a diverse base of consultants with whom we contract for particular services.

Key external resources and the roles they play in Educopia’s organizational infrastructure are as follows:

**Board of Directors**

As previously mentioned, the Board of Directors receives no compensation for the time its members dedicate to the Educopia Institute.

**Martin Halbert**, President. Martin Halbert is Dean of Libraries and Associate Professor at the University of North Texas. Martin has a Ph.D. from Emory University, an M.L.I.S. from the University of Texas, and a B.A. from Rice University. Martin has worked in library administration and systems positions at Emory University and Rice University. He was an ALA/USIA Library Fellow stationed in Estonia assisting with the automation of the Tartu University Library. He has also worked as a consultant for the IBM Corporation, and as a programmer for the University of Texas. As the founder of the MetaArchive Cooperative and the founding President of the Educopia Institute, Martin provides a solid voice of leadership to our distributed digital preservation network development and sustainability efforts.

**David Seaman**, Vice President. David Seaman is the Associate Librarian for Information Management at Dartmouth College Library. Prior to this position, he served from 2002-2006 as the Executive Director of the Digital Library Federation (DLF), an international consortium of major academic libraries who coordinate leading-edge research and development in libraries' use of electronic-information technology and who incubate projects and services that libraries need but cannot develop individually. David Seaman brings to the Board a deep knowledge of what factors influence libraries to collaborate and how to build strong alliances of research libraries.

**Tyler Walters**, Treasurer. As Associate Dean for the Georgia Institute of Technology Library and Information Center, Tyler Walters provides leadership, vision, and expertise in digital library programs, information technologies, content and collections management, archives and records, as well as scholarly communication, open access, and other information policy
initiatives. He brings this expertise to his role as an advisor of both the MetaArchive Services Group and the MetaArchive Cooperative, assisting us with our organizational infrastructure as well as our technical infrastructure.

**Rachael Bower**, Secretary. With a background in communications and library science, and having gone from academia to the world of Internet-startups and back again, Rachael Bower brings strong understandings of project management, organizational structuring, and fundraising to her role as a member of the MetaArchive Services Group Board.

**Greg Crane**, Member at large. Greg Crane’s work as the Winnick Family Chair of Technology and Entrepreneurship at Tufts University and Editor-in-Chief of the internationally renowned Perseus Project has focused on the pioneering creation of digital tools and resources for scholars, teachers, students, and other researchers. He brings to the Board an intimate knowledge of collaborative development work, fundraising, and of the need for new strategies and services for preserving the digital resources that researchers now depend upon to do their work.

**Consultants**

**Dwayne Buttler**, University of Louisville. Dwayne is the Evelyn J. Schneider Endowed Chair for Scholarly Communication at the University of Louisville. Dwayne has provided legal and copyright advice in drafting and updating the Cooperative Charter and Membership Agreement for the MetaArchive Cooperative and its administrative organization, the Educopia Institute.

**Krista Pantana Dempsey**, Pantana Accounting. Pantana Accounting files our tax documentation, provides us with internal audits of our activities, and handles payroll.

**Jeffrey Skinner**, Kilpatrick Stockton LLP. Our pro bono legal team at Kilpatrick Stockton has assisted us with various tasks, including helping us to determine the best management/organizational structure for the Cooperative, applying for 501c3 status, and establishing our employee policies.

**Kathleen Turaski**, Resonance, Co-Founder and Principal. Resonance has overseen the design and production of the Educopia institute and MetaArchive Cooperative logos, messaging, and websites.

**MetaArchive Cooperative Structure**

The MetaArchive Cooperative is an independent, international membership association that provides collaborative and distributed digital preservation solutions for cultural memory organizations, including university libraries, government and historical research archives, museums, and other similar institutions (http://www.metaarchive.org). The central missions of the MetaArchive Cooperative are to support, promote, and extend the practice of distributed digital preservation; to serve as a catalyst and guide for other networks that seek to implement the distributed digital preservation methods it has developed; and to educate cultural memory organizations about distributed digital preservation.

All MetaArchive Cooperative members share in the benefits and management of the Cooperative, and therefore have a shared interest in developing and sustaining its technical and organizational infrastructures. Each member organization runs a server (or MetaArchive-LOCKSS cache) for the overall network. Members bear responsibility for preparing their content for ingest, for monitoring their content after it is preserved, and for running/monitoring/maintaining their MetaArchive servers. The Cooperative is governed and managed by a Steering Committee of up to 15 members. These
members, all of whom represent organizations that are Sustaining Members in the Cooperative, provide direction for the Cooperative’s development.

**MetaArchive Shared Management Resources**

Key shared management resources and the roles they play in the MetaArchive Cooperative’s organizational and technical infrastructure are as follows:

**MetaArchive Steering Committee**

The MetaArchive Steering Committee is comprised of representatives from Sustaining Member organizations. These representatives give their time to the Cooperative as part of their organizations’ contribution to the MetaArchive Cooperative.

**Diane Butler**, Rice University. Diane Butler is Assistant University Librarian for Information Technology at Rice University, Fondren Library. Diane provides leadership, strategy, and vision for all technology in the library. Her department is responsible for maintaining the servers for the digital library projects, which include LOCKSS, CLOCKSS, and the MetaArchive Cooperative. Diane has worked with the Center for Digital Scholarship on many digital projects and is committed to digital preservation.

**Bill Donovan**, Boston College. Bill Donovan joined Boston College in June 2007. As Digital Preservation Manager, he is responsible for managing their digitization facilities, administering an ETD program, and implementing a Digital Preservation program. He brings to the Steering Committee his dual background in research and librarianship, with degrees in Experimental Psychology from Boston College and Florida State University and in Library and Information Science from Simmons College. He has conducted research on the visual system at Brown University, SRI International, and Stanford University Medical Center, and applied digital imaging to product development at Polaroid Corporation.

**Mike Furlough**, Penn State. Mike Furlough is Assistant Dean for Scholarly Communications and Co-Director of the Office of Digital Scholarly Publishing at Penn State University Libraries. At Penn State he leads the content stewardship services to support the life cycle of scholarly production, including curation, publication, preservation and outreach to researchers. He is currently co-PI for an IMLS funded grant, “The Pennsylvania Homefront in the Civil War” in which historians, archivists and librarians will collaborate to make archival collections more accessible. Furlough’s graduate training is in American Literature, but he ran away to join the Library at the University of Virginia, where he led services to support digital scholarship and oversaw the creation of UVA’s Scholar’s Lab. He currently serves as a member of ACRL’s Scholarly Communications committee, and edits the Scholarly Communications column for C&RL News.

**Emily Gore**, Clemson University. Emily Gore is Head of Digital Initiatives and IT at the Clemson University Libraries. Since her arrival at Clemson, Gore established a scan center, played a key role in the establishment of a campus-wide data management team, and is currently working to establish a Fedora-based Institutional Repository. Gore serves as the PI for the recently awarded IMLS National Leadership Grant to fund the Open Parks Grid, a collaborative project that will be a gateway to parks information. Prior to joining the faculty at Clemson, Gore managed the statewide digitization program in North Carolina, NC ECHO http://www.ncecho.org. During the course of her career, Gore has received over $2.5 million in grant funding. Emily currently serves as a community board member for the HubZero Consortium, a sustaining member of the MetaArchive Cooperative, co-chair of the ALA Digital Preservation Interest Group, and as immediate past chair of the ALA Collaborative Digitization Interest Group. She holds an MLIS from the University of Alabama and a BA from Clemson
University and was recently recognized by Lyrasis as the 2009 NextGen Librarian for Technology.

**Martin Halbert**, University of North Texas. Dr. Martin Halbert is Dean of Libraries and Associate Professor at the University of North Texas. He also currently serves as President of the MetaArchive Cooperative, a growing international digital preservation alliance of cultural memory organizations that was one of the founding partners of the US National Digital Preservation Program. He has served as principal investigator for grants and contracts totaling more than $6 M during the past six years, funding more than a dozen large scale collaborative projects among many educational institutions. His doctoral research and subsequent projects have focused on exploring the future of research library services. He has previously worked for Emory University, Rice University, UT Austin, and the IBM Corporation.

**Rachel Howard**, University of Louisville. Rachel Howard is the Digital Initiatives Librarian at the University of Louisville. She brings to the Steering Committee a solid knowledge of both library and museum preservation needs as she has worked with primary source materials for the Library of Congress, Smithsonian Institution, and other libraries and museums.

**Cinda May**, Indiana State University. Cinda May is Chair of the University Digital & Archival Services Department for the Indiana State University Library, which includes Wabash Valley Visions & Voices Digital Memory Project (WV3); Sycamore Scholars, ISU’s institutional repository; and University Archives. In January 2011 Cinda will assume responsibility for the Library’s Special Collections Department as Interim Chair. In her capacity as project director of WV3, Cinda works with small, mostly rural cultural organizations to document and preserve the history and cultural heritage of the region through a collaborative effort. She furnishes the synergy that allows area residents to participate in WV3 on an individual basis. In addition, Cinda supplies leadership for developing a campus-wide digital preservation policy for Indiana State University intended to address the needs of both administrative and academic units.

**Gail McMillan**, Virginia Tech. Gail McMillan, Director of the Digital Library and Archives, joined the Virginia Tech library faculty in 1982 after working at the Smithsonian Archives and receiving master's degrees in library science and history from the University of Maryland, College Park. Since 1994 she has led the Digital Library and Archives—originally known as the Scholarly Communications Project. Prof. McMillan also led Special Collections for a decade, 1997-2007, and continues to oversee the April 16, 2007, digital archive. She has served in numerous national and statewide capacities, including IMLS grant review panels, the Technical Advisory Committee of the Digital Library Federation for its Open Archives Initiative, and the Special Collections Committee of the Virginia Heritage Project for VIVA, the Virtual Library of Virginia. Throughout her career she has spoken and published about various aspects of digital libraries. Her recent publications and presentations focus largely on electronic theses and dissertations—an initiative she helped launch that resulted in Virginia Tech being the first university to require ETDs. She is the 2007 recipient of the Networked Digital Library of Theses and Dissertations' ETD Leadership Award for "exemplary work to establish, extend, and support the ETD initiative across the globe."

**David Richardson**, University of Hull. David Richardson is Director of the Wilberforce Institute for the study of Slavery and Emancipation (WISE). He is Professor of Economic History in the Department of History, University of Hull and formerly Ford Foundation Senior Visiting Scholar, W. E. B. Du Bois Institute for Afro-American Research, Harvard University (1987-8) and Post-doctoral Associate, Gilder-Lehrman Center for the Study of Slavery, Resistance and Abolition, Yale University (2004). As a scholar who has spent more than 30 years collecting data and building a database that is now an open access website and the best source of information about the transatlantic slave trade, David Richardson knows firsthand the importance of
preserving digital objects of scholarly value. He brings this perspective to his work on the Steering Committee.

**Sammie Morris**, Florida State University. Sammie Morris has served as the Associate Director for Special Collections and Archives since May 2010. She provides leadership for the Special Collections and Archives Division, which includes administrative oversight of the Digital Library Center. In her previous position as Head of Archives and Special Collections at Purdue University, she led the Digital Initiatives Team for several years. She has served as chair of the Manuscript Repositories Section of the Society of American Archivists, is a past president of the Society of Indiana Archivists, and was appointed to membership on the Indiana State Historic Records Advisory Board, where she served from 2006 to 2010. Sammie was selected for participation in the nation’s first Archives Leadership Institute, hosted by the University of Wisconsin-Madison’s School of Library and Information Studies in 2008. She has published articles in a variety of archival and library science journals, and co-developed and co-instructed courses on archival theory and practice for Purdue University. She has reviewed grant proposals for the NHPRC and the Social Sciences and Humanities Research Council of Canada. Sammie has extensive knowledge and experience managing archives and manuscripts collections, as well as digitization and preservation of original primary source materials.

**Aaron Trehub**, Auburn University. Supports the Steering Committee in myriad ways, including collection management and organizational infrastructure work. As part of Auburn University’s commitment to MetaArchive, Aaron helped to draft the Cooperative Charter and Membership Agreement for MetaArchive, and is actively promoting the Cooperative’s activities internationally through organizing a major conference in Tallinn, Estonia in 2011.

**Tyler Walters**, Georgia Tech. Tyler Walters, Georgia Tech. As Associate Dean for the Georgia Institute of Technology Library and Information Center, Tyler Walters provides leadership, vision, and expertise in digital library programs, information technologies, content and collections management, archives and records, as well as scholarly communication, open access, and other information policy initiatives. He brings this expertise to the MetaArchive Cooperative in myriad ways in his advisory capacity, including assisting with technology planning, co-designing the Cooperative Charter and Membership Agreement, and having a strong engagement in our sustainability planning.

**MetaArchive Technical Support**

**Jon Bell**, Auburn University. Technical Lead and System Administrator

**Mildred Coates**, Auburn University. Plugin Developer and Metadata Specialist

**Meg Critch**, Boston College. Metadata Specialist

**Brian Meuse**, Boston College. Technical Lead, System Administrator, and Plugin Developer

**Chris Alexander**, Clemson University. Technical Lead

**Plato L. Smith, II**, Florida State University. Technical Lead

**Bill Anderson**, Georgia Tech. Plugin Developer and Metadata Specialist

**Chris Helms**, Georgia Tech. System Administrator

**Ryan Speer**, Georgia Tech. Collections Management
**Paul Asay**, Indiana State University. System Administrator

**Xiaocan Wang**, Indiana State University. Technical Lead and Plugin Developer

**Dan Coughlin**, Penn State University. Applications Developer

**Mike Giarlo**, Penn State University. Technical Lead

**Patricia Hswe**, Penn State University. Collection Curator

**Sue Kellerman**, Penn State University. Preservation Officer

**Denis Galvin**, Rice University. Technical Lead, System Administrator, and Plugin Developer

**Geneva Henry**, Rice University. Metadata Specialist

**Alex Sharaz**, University of Hull. Technical Lead, System Administrator, and Plugin Developer

**Delinda Buie**, University of Louisville. Collections Management

**Dwayne Buttler**, University of Louisville. Legal Advisor

**Carrie Daniels**, University of Louisville. Metadata Specialist

**Calvin Miracle**, University of Louisville. Technical Lead and System Administrator

**Kurt Nordstrom**, University of North Texas. System Administrator and Plugin Developer

**Mark Phillips**, University of North Texas. Technical Lead

**Collin Brittle**, Virginia Tech. Plugin Developer and Data Wrangler

**Paul Mather**, Virginia Tech. System Administrator

**Human Resources Needs**

In order to maintain cultural memory organizations’ active role in creating, disseminating, and preserving content, the Educopia Institute distributes work across its programs’ membership wherever possible. Rather than depending exclusively on membership revenues, it also actively cultivates consulting revenues and grant- and contract-based funding. To date, Educopia has been highly successful at fundraising, and current grants and contracts will fund our operations through at least September 2011. We also anticipate having new funding from federal and private sources in place to continue supporting the Cooperative through September 2013. By that time, we will have transitioned to a self-sustaining initiative with a full array of services that help to support the ongoing programs of the Institute.

**Notes on this document**

An early version of this document that focused just on the MetaArchive Cooperative was drafted by Katherine Skinner and approved by the Steering Committee on 2008-11-18. It was reworked to include information about Educopia Institute and its programs by Matt Schultz and Katherine Skinner in Fall 2010 and was reviewed and approved by the Educopia Board of Directors and the MetaArchive Cooperative Steering Committee in Winter 2011.
Financial Plan
Educopia Institute Business Model

2011-12-01

Summary
This document describes the financial plan of the Educopia Institute for the period 2011–2015. It briefly covers expectations for Educopia’s growth and how this growth will impact the organization’s revenue streams and anticipated expenditures for its programs.

About the Educopia Institute

The Educopia Institute is incorporated under the laws of Georgia and is a 501c3 non-profit organization that serves as a coordinating and catalytic entity for leaders from university libraries, government and historical research archives, museums, and other similar institutions. Instead of creating and selling products, Educopia helps the cultural memory community to build its own knowledge, resources, and infrastructure. This approach ensures that cultural memory organizations maintain active roles in acquiring, providing access to, and preserving content in the new digital environment. It also ensures that Educopia maintains a lightweight administrative structure with a low overhead and great flexibility. Educopia’s primary activities include offering timely and relevant consulting services on digital creation and curation activities (Educopia Consulting), and providing technical and organizational support for collaborative and cooperative digital programs (e.g., MetaArchive Cooperative).

The Market

The vast majority of U.S. based universities, university libraries, archives, and data research units are currently producing and managing large amounts of “born digital” and digitized materials of cultural, historical and scientific value. Increasingly this is also becoming true for national, regional, state and local museums, independent cultural and historical research centers, and government record-keeping agencies. As documented by previous surveys and market analyses administered and produced by Educopia, these communities have had very few trustworthy solutions to the pressing problems associated with creating, acquiring, managing, disseminating, and preserving digital content, but many of them are actively seeking such solutions.

To date, dozens of unsolicited inquiries have been made by institutions that are interested in

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1 For a current count of U.S. based academic, special, and government libraries see: http://www.ala.org/ala/professionalresources/libfactsheets/alalibraryfactsheet01.cfm (13,416 institutions currently reported in this market).
2 The Society of American Archivists lists over 70 archival organizations in the U.S. and Canada each with numerous affiliated university, state, and independent archives, see here: http://www.archivists.org/assoc-orgs/directory/index.asp#1.
3 In 2009 the National Science Foundation reported 711 U.S. based colleges and universities reporting nonzero science and engineering research expenditures. See here: http://www.nsf.gov/statistics/srvyrdexpenditures/; the National Institutes of Health also reported over 38,000 individual awards totaling over $17 billion dollars to major U.S. universities and research institutes (1 or more in each state and territory) in 2009, see here: http://report.nih.gov/award/organizations.cfm.
4 The American Association of Museums currently reports over 17,500 U.S. based museums, see here: http://www.speakupformuseums.org/museum_facts.htm.
5 Local museums may occasionally also house historical societies and research centers, but Educopia also reaches out to independent cultural and historical research centers such as Appalshop, see here: http://appalshop.org/.
6 The National Archives and Records Administration lists over 20 state/regional federal government records centers, available here: http://www.archives.gov/locations/regional-archives.html; and the Council on State Archivists lists over 60 state archives (1 or more in each state), see here: http://www.archives.gov/locations/regional-archives.html.
Educopia’s unique combination of services. This constitutes a market segment with an overwhelming need that is currently unmet by other less well-rounded solutions.

**Educopia’s Offerings**

The Educopia Institute can meet the needs of these communities by 1) promoting Educopia Consulting and its variety of services for digital curation planning activities (production/acquisition, access, and preservation); 2) recruiting new MetaArchive member organizations via targeted outreach efforts; and 3) evolving new service offerings where necessary to accommodate new institutions and content types (e.g., scientific research data). For more details on these proposed solutions see the Educopia Institute Marketing Plan.

**Educopia Consulting**

Currently, Educopia Consulting has undertaken work in two core areas: digital preservation planning and digital scholarship program planning. Clients to date include the Northeastern Digitization Lyris, BCR, the Folger Shakespeare Library, Arizona State Library and Archives, Indiana State University, Minnesota Digital Library, University of North Carolina at Greensboro, University of North Texas, and New Orleans Jazz and Heritage Foundation.

In 2011, Educopia Consulting’s revenues comprised approximately 10% of Educopia’s revenue stream. By 2013, we aim to increase this to 25% of Educopia’s total revenue stream.

Clients have thus far contracted with Educopia Consulting for services after meeting the Executive Director via events and presentations or through personal recommendations. This year, Educopia Consulting will begin a strategic outreach process through the creation of an Educopia Consulting fact-sheet that can be distributed at events, a webpage that describes our offerings and provides references and examples of our work to date, and an email campaign directed toward prospective clients that have expressed interest in working with Educopia in the past.

**MetaArchive Cooperative**

The digital preservation market is approaching a tipping point regarding programmatic adoption of preservation solutions for their digital assets. Based on our conversations with other leaders in the field, we expect that most libraries will be actively seeking digital preservation solutions within the next 5 years. In the next year, we plan to double our university library membership (from 17 to 35 by June 2012). By June 2016, we anticipate operating a network with at least 70 members.

Our expansion has been carefully planned and executed to date. We intentionally limited the community’s growth between 2007-2010, in order to streamline and test the process each new member undergoes as they join our community. In 2011, we are launching our first membership campaign, aimed primarily at existing members of the LOCKSS Alliance, both in the U.S. and abroad.

**Revenue Projections**

Educopia Institute is supported through a mixed funding model comprised of institutional (membership dues/space fees), grant, event, and consulting streams.

**Institutional Funds** are intended to support our hosted programs. Currently these are based on MetaArchive’s membership composition, where each member pays a set fee for its annual membership and space allocation. As we add new programs, these programs will be expected to support themselves in a similar manner.

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8 In January 2012, we are transitioning to a funding model that no longer depends on sponsored funding for our operational expenses. Ongoing operations will be funded in full through revenue from Educopia Consulting, MetaArchive membership fees, and event hosting revenues.
Grant Funds are used to support expansion areas for the Educopia Institute. Currently, a contract with the Library of Congress supports portions of Educopia's work through September 2011. A grant from the National Historical Publications and Records Commission supports portions of the MetaArchive Cooperative’s work through December 2011. A grant from the National Endowment of the Humanities will support portions of the MetaArchive Cooperative’s work through December 2013. Additional grants are being pursued currently, including one for MetaArchive and one for a prospective new program on digital scholarship as it relates to the topic of Coerced Migration.

Event Funds are used to support the costs associated with hosting meetings, conferences, and workshops on topics of relevance to the Educopia Institute’s programmatic missions. In 2010, Educopia hosted a meeting for Private LOCKSS Networks (PLNs). In 2011, it hosted an international conference. Beginning in 2013, we anticipate hosting at least one event per year with registration fees of between $200-$350.00/participant. We anticipate spending approximately $100/participant on faculty travel, workshop location, and workshop food when hosting these programs. Our total expected revenue per year from hosted events is approximately 5% of our operating budget.

Consulting Revenues are intended to support staffing costs for Educopia Institute. Our consulting revenues currently fund approximately 10% of our staffing costs. By 2012, consulting revenues are projected to cover approximately 25% of our staffing costs.

Expenditures

Educopia Institute’s expenses break down into three main categories: Personnel, Facilities, and Other.

Personnel includes salary lines and benefits for 3.5 FTE employees. Approximately 2.75 FTE supports the work of the MetaArchive Cooperative, and the other .75 FTE supports the overall work of Educopia, including program administration and Educopia Consulting. Because much of our staffing need for MetaArchive is satisfied by the work provided by our members (through committee service and hosting of our technical infrastructure in their local environments), we anticipate that we will not need to expand our staffing until our membership exceeds 70 member institutions. Over the next five years, we anticipate adding no more than .5 FTE in staffing.

Facilities includes our virtual office space (Regus), telecommunications needs (Amazon cloud-based servers that host our administrative infrastructure, LSoft license and SSL certificate for listserv, ooVoo videoconferencing), and equipment (computers for each employee refreshed on a standard three-year cycle). These costs should not expand by more than 5% over the five-year projected period.

Other includes our annual GA Corporation registration fee, D&O insurance, worker’s comp, unemployment, consultants (Pantana accounting), meeting expenses (annual meeting) and travel. These costs should not expand by more than 5% over the five-year projected period.

Future Operations

As evidenced by our budget projections, we intend to be a self-sustaining endeavor as of January 2012. We will be able to support ourselves from revenue generated from our membership fees, workshops, and consulting fees. Grants and contracts will be used to fund expansion and research projects, not our base operating expenses.

Notes on this document

An early version of this document that focused just on the MetaArchive Cooperative was drafted by Katherine Skinner and approved by the Steering Committee on 2008-03-08. It was reworked to include information about Educopia Institute and its programs by Matt Schultz and Katherine Skinner in Winter 2010 and was reviewed and approved by the Educopia Board of Directors and the MetaArchive Cooperative Steering Committee in Winter 2011.
Summary

This document describes the marketing plan for the Educopia Institute and its two programs: Educopia Consulting and MetaArchive Cooperative. This plan concentrates on Educopia’s primary markets: University libraries, archives, museums, historical centers, state and federal government agencies, and data research centers.

Educopia Institute and its Programs

The Educopia Institute is incorporated under the laws of Georgia and is a 501c3 non-profit organization that serves as a coordinating and catalytic entity for leaders from university libraries, government and historical research archives, museums, and other similar institutions. Instead of creating and selling products, Educopia helps the cultural memory community to build its own knowledge, resources, and infrastructure. This approach ensures that cultural memory organizations maintain active roles in acquiring, providing access to, and preserving content in the new digital environment. It also ensures that Educopia maintains a lightweight administrative structure with a low overhead and great flexibility. Educopia’s primary activities include offering timely and relevant consulting services (Educopia Consulting), and providing technical and organizational support for collaborative and cooperative digital programs (MetaArchive Cooperative).

Educopia Consulting

Educopia Consulting was established to provide advising services and training related to the use of collaborative infrastructures to support the core missions of cultural memory organizations in the digital environment. These services include on-site and virtual consulting, hosting conferences and workshops, outreach development projects, and producing publications that document successful collaborative strategies and articulate specific new models that cultural memory organizations may use as they work together for their mutual benefit.

MetaArchive Cooperative

The MetaArchive Cooperative is an independent, international membership association that provides collaborative and distributed digital preservation solutions for cultural memory organizations, including university libraries, government and historical research archives, museums, and other similar institutions (www.metaarchive.org). The MetaArchive provides trustworthy distributed digital preservation services, including data management and distributed storage for the secure preservation of multi-format collections of digital objects, and training opportunities facilitated by MetaArchive staff and members for groups/individuals interested in distributed digital preservation methods.
The Market

The vast majority of U.S. based university libraries, archives, and data research units are currently producing and managing large amounts of "born digital" and digitized collections of cultural, historical and scientific value. Increasingly this is also becoming true for national, regional, state and local museums, independent cultural and historical research centers, and government record-keeping agencies. As documented by previous surveys and market analyses administered and produced by Educopia these communities have had very few trustworthy solutions to the pressing problem of both preserving these digital collections and strengthening their roles as stewards, but many of them are actively seeking such solutions. To date, dozens of unsolicited inquiries have been made by institutions that are interested in Educopia’s unique combination of services. This constitutes a market segment with an overwhelming need that is currently unmet by other less well-rounded solutions.

Competitive Advantage

The Educopia Institute operates with a unique distributed and collaborative organizational model, which extends to its consulting services (Educopia Consulting) and its current preservation infrastructure (MetaArchive Cooperative). For example, Educopia central staff and staff at project member institutions are not collocated in a single office or institution, but rather work in decentralized locations and coordinate remotely through videoconferencing, email, phone, and other secure network services. This enables the Institute to avoid the overhead and expense of a central office space, as well as to pool resources and expertise, all of which dramatically reduces supply and maintenance costs for the business, and promotes transparent and trustworthy activities.

The trend today in current digital library reports and other publications is to talk about preservation as a prohibitively costly and complicated activity. Likewise, collaborative partnerships across cultural memory organizations are sometimes viewed as risky for reasons related to shared investments, free-rider, and intellectual property liabilities. This has unnecessarily left many institutions wondering if they should turn to third-party service providers as outside experts who can take on this burdensome activity on their behalf. More than a decade of outsourcing has shown that costs for vendor services are consistently rising for cultural memory institutions, and many of the current third-party arrangements are "black box" solutions, some trapping even open access documents behind toll walls.

Educopia will continue to demonstrate alternatives to these assumptions through its commitment to distributed and collaborative approaches. These represent persuasive advantages in both cost and transparency over more vendor-driven, and less community-governed solutions that are ultimately divorcing institutions from their traditional roles as stewards over their unique digital resources.

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1 For a current count of U.S. based academic, special, and government libraries see: http://www.ala.org/ala/professionalresources/libfactsheets/alalibraryfactsheet01.cfm (13,416 institutions currently reported in this market).
2 The Society of American Archivists lists over 70 archival organizations in the U.S. and Canada each with numerous affiliated university, state, and independent archives, see here: http://www.archivists.org/assoc-orgs/directory/index.asp#1.
3 In 2009 the National Science Foundation reported 711 U.S. based colleges and universities reporting nonzero science and engineering research expenditures. See here: http://www.nsf.gov/statistics/srvyrdexpenditures/; the National Institutes of Health also reported over 38,000 individual awards totaling over $17 billion dollars to major U.S. universities and research institutes (1 or more in each state and territory) in 2009, see here: http://report.nih.gov/award/organizations.cfm.
4 The American Association of Museums currently reports over 17,500 U.S. based museums, see here: http://www.speakupformuseums.org/museum_facts.htm.
5 Local museums may occasionally also house historical societies and research centers, but Educopia also reaches out to independent cultural and historical research centers such as Appalshop, see here: http://appalshop.org/.
6 The National Archives and Records Administration lists over 20 state/regional federal government records centers, available here: http://www.archives.gov/locations/regional-archives.html; and the Council on State Archivists lists over 60 state archives (1 or more in each state), see here: http://www.archives.gov/locations/regional-archives.html.
Proposed Marketing Strategies

Educopia Consulting

1. Promoting Educopia Consulting and its services via effective channels.
2. Engaging in outreach to similar groups.
3. Evolving services where necessary to accommodate new institutions and content types (e.g., scientific research data).
4. Making several new publications widely available via print-on-demand and free pdf downloads.

MetaArchive Cooperative

1. Recruiting new member organizations via targeted marketing campaigns.
2. Leveraging organizations’ existing participation in the LOCKSS Alliance and the Networked Digital Library of Theses and Dissertations to expand membership.

Each of these focused strategies will be described in further detail below.

Educopia Consulting Strategies

Promoting Educopia Consulting

Educopia Consulting has been highly successful in 2010 in providing a range of advisory services related to appraisal and selection, preservation planning, technical assistance, grant writing advice, and negotiating between preservation partners. Groups that have benefited from these services include Indiana State University, University of North Texas, the New Orleans Jazz and Heritage Foundation, the Folger Shakespeare Library, the University of North Carolina at Greensboro, the Minnesota Digital Library, and HathiTrust.

In 2011, Educopia Consulting will develop a series of affordable web delivered presentations and workshops. Educopia will spotlight these resources strategically on its website and enhance their appeal through client testimonials. To ensure that these revenue generating resources reach the broadest and most relevant audiences possible, Educopia’s Executive Director and Collaborative Services Librarian will reach out beginning in June 2011 to affiliated consultants and knowledgeable program partners to discover the most widely distributed and effective promotional channels (listservs, consultant lists, etc.) for pointing to these resources and services.

In addition, Educopia staff and MetaArchive members will jointly seek venues/opportunities for hosting a series of one-day preservation policy-building workshops, which have already been piloted with great success to several cultural memory organizations in Boston, MA in October 2010. These activities not only generate a revenue stream for underwriting Educopia’s current programs, but they also represent key opportunities for promoting its solutions to new and interested institutions.
Outreach to Similar Groups

The Educopia Institute strongly believes that fostering collaborative endeavors between like-minded yet heterogeneous institutions offers the best opportunities for addressing the challenges facing the preservation of digital content and ensuring sustainable cyberinfrastructures. Through its consulting endeavors and its grant-funded partnerships Educopia has taken a leading role in bringing individual groups together to agree upon common preservation approaches, re-usable tools, technical exchange protocols, and sustainable organizational agreements. Groups that Educopia has coordinated with on technical projects include Chronopolis, University of North Texas Libraries, and Data-PASS. On organizational development, Educopia has worked closely with groups such as Minnesota Digital Library, Data-PASS, ADPNet, and PeDALS.

These endeavors have always been coupled with joint outreach at major conferences and other events to communicate progress on shared activities and have resulted in opportunities for individual institutions to evaluate a range of preservation options best suited for their needs. Because Educopia has carefully sought out constructive affiliations with groups that are seeking to address constituencies and content types that are only mildly overlapping on a competitive level the pros of partnering have dramatically outweighed the cons to date. Each of the groups has realized development innovations that have improved their preservation on trustworthy levels, and which do not currently narrow the competitive gaps between them.

In 2011, Educopia’s Executive Director and Collaborative Services Librarian will reach out to additional groups such as DuraSpace, DAITSS, and Artefactual to propose additional collaborations and grant opportunities to ensure similar innovations and benefits for all groups involved.

Serving New Institutions and Content Types

To date, Educopia’s preservation services have grown primarily through the participation of university libraries and archives. However, it has engaged in numerous negotiations with other institutional types of varied sizes and available resources such as museums, government agencies, and data research units to discuss their unique content types and preservation needs. Many of these entities have expressed minor constraints at the level of curatorial needs, technical expertise, bandwidth availability, and the affordability of LOCKSS Alliance fees.

Collaborative experiments with smaller institutions like the Folger Shakespeare Library are showing that LOCKSS may be sufficiently flexible on technical levels and Educopia’s central staff could likely be cost-effectively contracted to help overcome minor hurdles to participation in the current network. LOCKSS also remains an appealing solution to these types of institutions due to its security, its versioning capabilities, and low barriers to ingest preparation (including its format agnostic designations). Educopia’s Executive Director has also been successful in 2010 in negotiating experimental cost models for LOCKSS Alliance fees through the development of its Collaborative Member category. Further negotiations with LOCKSS on cost models will continue throughout 2011.

Regardless, Educopia remains committed first and foremost to the success of its distributed and collaborative organizational model, and believes that there are a range of technical solutions that could be explored and embraced to meet the critical preservation needs of diverse institutions and their dynamic digital assets. The need for adaptable, flexible and relevant solutions is great and growing. According to a 2009 ARL survey seeking to gauge the readiness of e-science curation in 123 member research libraries, “…the majority of respondents (23 of 42) indicated that there were no designated units to provide data curation and support for scientific research data on their campus,” and furthermore only a “…few described more advanced services such as “archiving relevant data and curating it for
long-term preservation and integration across datasets” and “providing curatorial and data stewardship services” as part of data management plans.8

In 2011, Educopia Consulting will identify entities both within and beyond major universities and seek to establish pilot curation/preservation projects and consulting opportunities that can help bring parties together at an organizational level to agree upon the necessary approaches and cyberinfrastructures. Educopia is confident that its success in navigating such collaborations, as mentioned above in Outreach to Similar Groups, can play a timely role in addressing the needs.

Promoting New Publications

The Educopia Institute has actively sought to integrate the knowledge, professional experience and expertise of its staff and program partners through publishing scholarly and technical literature that advances the development and use of shared cyberinfrastructure to support collaborative scholarly creation, preservation, and dissemination of digital content. These publications have been instrumental in interpreting technical and organizational issues related to these approaches as well as solidifying institutions’ decision-making when considering Educopia’s preservation or advisory services.

Educopia’s first publication, A Guide to Distributed Digital Preservation, was launched in February 2010 and reached a readership of over 1,000 within the first month of publication. The Guide is the first of a series of volumes that will be published describing successful collaborative strategies and articulating specific new models that may help cultural memory organizations work together for their mutual benefit. The second major volume, Aligning National Approaches to Digital Preservation will be published in Spring 2012.

Additional publications are being researched, authored and reviewed for final publication in early 2011, including one major Association of Research Libraries Report titled New Roles for New Times: Digital Curation for Preservation co-authored by Tyler Walters (Treasurer) and Katherine Skinner (Executive Director).

MetaArchive Cooperative Strategies

Targeted Marketing Campaigns

To date, Educopia has largely relied upon event outreach and publications to promote the MetaArchive Cooperative. This year, it will pursue lightweight and targeted marketing strategies will to expand membership rapidly. Through consultation with its existing membership, it has been determined that the most effective approach for reaching decision-makers at institutions consists of clearly outlining Educopia’s competitive advantage through tailored messaging. This will be delivered via a three-step series of phone/voicemail contact, email follow-up, and referral to web-based resources targeted at the digital projects/preservation management level. MetaArchive members have affirmed that management in these areas still represents the most relied upon channel for promoting digital preservation solutions up the chain to higher-level institutional management.

Educopia’s Executive Director will work closely with a well-established college and university marketing firm to develop messaging and to identify and implement improvements to its website. Outreach will begin in February 2011 and will initially be aimed at both U.S. and international institutions that are already members of the LOCKSS Alliance and the Networked Digital Library of Theses and Dissertations (23 common institutions between these memberships - more on this below). Previously gathered feedback related to addressing the needs of museums, government agencies, and data

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research units will also be synthesized for best approaches to messaging and delivery of promotional resources.

**Leveraging Existing Memberships**

One of the most difficult barriers to entry in the MetaArchive network is the current requirement that all members must pay LOCKSS Alliance fees in addition to MetaArchive membership fees. For institutions participating in the global LOCKSS network for journals, this issue does not arise. This group of institutions is already paying LOCKSS Alliance fees, and via joining MetaArchive, they may leverage their membership for multiple purposes. Thus, LOCKSS Alliance members are the most likely candidates for joining the MetaArchive network and are the core community upon which MetaArchive will focus this year in its membership recruitment work.

Another core group of interest to MetaArchive this year is the Networked Digital Library of Theses and Dissertations. All of its members are managing digital theses and dissertations, and many of them are going “e-only” with their ETD collections. This type of content is of great importance, not just to the library, but to the institution as a whole. As such, we believe that this genre will be a leading “tipping point” marker for preservation activities. We have been engaged in a successful pilot project with the NDLTD for the past two years. Educopia will build upon this relationship this year by actively recruiting new members from this group. It will also continue to offer a joint-membership discount with NDLTD of 5% to all who are members in good standing in both groups.

Beginning in February 2011, Educopia’s Executive Director and Collaborative Services Librarian will begin reaching out to contacts at institutions who are currently LOCKSS Alliance (200+ U.S./international libraries) and NDLTD (75+ U.S./international institutions) members using a targeted marketing campaign to promote the MetaArchive network as a natural and cost-effective fit for preserving their digital collections. These institutions will be able to leverage their existing membership fees in the LOCKSS Alliance for this additional content (more on this below), and will receive an immediate 5% discount on their membership due to a joint agreement between NDLTD and MetaArchive (see Section 4 of the Cooperative Charter).

**Notes on this document**

An early version of this document that focused just on the MetaArchive Cooperative was drafted by Katherine Skinner and approved by the Steering Committee on 2008-03-08. It was reworked to include information about Educopia Institute and its programs by Matt Schultz and Katherine Skinner in Winter 2010 and was reviewed and approved by the Educopia Board of Directors and the MetaArchive Cooperative Steering Committee in Winter 2011.
Summary

The following is an assessment of the key elements of the Educopia Institute and its two programs, Educopia Consulting and MetaArchive Cooperative that impact the organization’s performance, sustainability, and accountability.

About the Educopia Institute

The Educopia Institute is incorporated under the laws of Georgia and is a 501c3 non-profit organization that serves as a coordinating and catalytic entity for leaders from universities, university libraries, government and historical research archives, museums, and other similar institutions. Instead of creating and selling products, Educopia helps the cultural memory community to build its own knowledge, resources, and cyberinfrastructure. This approach ensures that academic and cultural memory organizations maintain active roles in acquiring, providing access to, and preserving content in the new digital environment. It also ensures that Educopia maintains a lightweight administrative structure with a low overhead and great flexibility. Educopia’s primary activities include offering timely and relevant consulting services in the areas of digital creation, digital curation, and collaborative digital scholarship (Educopia Consulting), and providing technical and organizational support for collaborative and cooperative digital programs (MetaArchive Cooperative).

Organizational Infrastructure Attributes

Governance & Organizational Viability: Educopia Institute primarily consists of a lightweight hosting apparatus and two programs: Educopia Consulting and MetaArchive Cooperative. Administrative practices for the Institute and for Educopia Consulting are well documented to protect its programs in case of staffing changes. Educopia ensures the sustainability of its hosted program, MetaArchive Cooperative, does not depend solely on centralized staff or any one of its member organizations by maintaining a collective governance structure and distributing knowledge and responsibility throughout its hosted program’s membership. MetaArchive also creates and documents policies and procedures to protect its programs in the case of technical, legal, or management failures by any of its members.

Organizational Structure and Staffing: The Educopia Institute’s intentionally decentralized staffing structure ensures that knowledge and skills are distributed and shared across the central staff and membership of its program, MetaArchive Cooperative.

Procedural Accountability and Policy Framework: Educopia Consulting requests evaluations from each of its clients and seeks to improve its offerings based on client feedback. The Educopia Institute regularly incorporates feedback from MetaArchive Cooperative’s members via its committee-based structure and its weekly communications. It is responsive to technological developments and is accountable to stakeholders from the extended community of cultural memory organizations.

Financial Sustainability: The Educopia Institute is supported by a funding model with a mixture of revenue streams that includes membership revenues, consulting revenues, contract and grant funding,
and revenues from events. Capital risks are mitigated through a combination of legal agreements and Educopia’s decentralized ownership model, in which Educopia does not own equipment or other assets. Educopia holds a firm commitment to short and long-term planning, focused first on maintaining its core operations and second on exploring possibilities for technical and organizational growth.

**Contracts, Licenses and Liabilities:** Individual institutions that become program members agree to bear responsibility for resolving copyright and intellectual property issues related to digital assets locally per the Membership Agreement.

**Governance & Organizational Viability**

**Governance**

**The Mission of the Educopia Institute**

The Educopia Institute serves and advances the well-being of universities, libraries, archives, information/research centers, museums, and historical societies by fostering the advancement of shared information systems and infrastructures. Educopia acts as a catalyst to assist and advise universities, libraries, and other closely affiliated academic and cultural memory institutions in the creation, acquisition, dissemination, and preservation of digital content in socially responsible ways.

In furtherance of these aims, Educopia specializes in the following:

1. Providing organizational support for collaborative and cooperative digital programs in educational institutions, including universities, libraries, archives, and museums.

2. Offering advising services, conducting research, and sharing results through consulting activities for universities, libraries, and cultural memory organizations.

3. Producing publications and hosting symposia, seminar, and workshop activities.

4. Coordinating library services to catalyze cross-institutional projects with academic and cultural institutions, applying for grants on their behalf, and administering such grants when awarded.

The strength of the Institute’s approach comes precisely from its decentralized goal of fostering the creation of successful cyberinfrastructure elements in the cultural memory community, rather than through a process of accumulating assets of its own. This approach builds knowledge and resources in the extended community of beneficiaries whom the Institute assists.

**Administration**

The Educopia Institute is incorporated under the laws of Georgia and is a 501c3 non-profit organization that serves as a coordinating and catalytic entity for leaders from university libraries, government and historical research archives, museums, and other similar institutions. Educopia’s primary activities include providing organizational support for collaborative and cooperative digital programs, offering consulting services, conducting research, producing publications, hosting events, and assisting cultural institutions with applying for and administering grants. It is served internally by a central administrative and technical staff and overseen externally by a Board of Directors. This Board provides oversight and fiduciary responsibility for the Educopia Institute.
For a detailed overview of the Educopia Institute's organizational infrastructure as these apply to its two programs, Educopia Consulting and the MetaArchive Cooperative, please see the Educopia Institute Management Plan.

**Organizational Viability**

**Governance Documents**

The Educopia Institute has formalized the following documentation regarding its business practices: Strategic Plan, Management Plan, Operations Plan, Marketing Plan, and Financial Plan. These documents are updated at least annually to reflect changes in requirements and practices of the organization. The updates are reviewed and approved by the Educopia Board of Directors and the MetaArchive Steering Committee.

The MetaArchive Charter and Membership Agreement exemplify Educopia's efforts to develop organizational viability for its programs. The MetaArchive Charter outlines the mission and operating principles; membership eligibility, benefits, responsibilities, and costs; organization and governance; and services and operations of the Cooperative. The Membership Agreement formalizes the legal relationship between the Cooperative and its member organizations.

The Cooperative Charter documents the practices and roles and responsibilities for both members and the organization. The Charter addresses issues that may arise in a cooperative governance structure, and outlines policies that protect the existence of the Cooperative in the case of technical, legal, or management failure by any of its members. These agreements promote transparency and accountability in all actions supporting the operation and management of the Cooperative.

The Membership Agreement articulates and informs potential members of the rights and responsibilities of joining the MetaArchive Cooperative and establishes the framework for ordering legal relationships among the members such as payment of fees, sharing of resources, duration of membership, and other facets of the relationship. The Agreement binds members, the MetaArchive Cooperative, and any successors in interest to certain conditions specified within it. It also gives some certainty to the Cooperative relationships while remaining sufficiently flexible to address evolving needs of the Cooperative and members in a changing technological and legal landscape.

**Contingency Planning**

Educopia makes every effort to ensure the ongoing viability of its programs. As Educopia Consulting serves clients on a limited timeframe and basis, this program uses structured client-consultant agreements to set parameters around each job, including clauses defining what occurs if the work is not completed for any reason.

For the MetaArchive Cooperative, contingency plans have been created to define what would occur if Educopia and/or MetaArchive Cooperative were to dissolve.

1. Members could move the hosting apparatus from Educopia to one of the member sites, to the LOCKSS Team at Stanford, or to another PLN; or
2. Members could move their content to the Chronopolis preservation network, an iRODS-based solution, using a technical bridge implemented in 2010.
Organizational Structure and Staffing

The Educopia Institute’s ongoing programmatic duties are not centralized; they have been intentionally structured such that they may be distributed across Educopia’s central staff and any hosted programs’ member organizations’ staff and faculty. Key to Educopia’s organizational model is the belief that shared cyberinfrastructure’s sustainability depends upon the distribution of both technical infrastructure and the knowledge and ability to run such infrastructure across a program’s membership. The distributed nature of the services is intended to keep the organizational infrastructure of Educopia as lightweight as possible. Sustainability then depends on the distributed framework and the continued commitment of members, not solely on Educopia’s employment of a central staff.

The Educopia Institute’s central staff consists of four positions:

- An Executive Director (full-time), who provides leadership for the Educopia central staff, runs Educopia Consulting, and acts as Program Manager for the MetaArchive Cooperative.
- A Collaborative Services Librarian (full-time), who assists with orienting new members both technically and administratively to the Cooperative, and coordinates with grant project partners to advance distributed digital preservation.
- A Software Engineer (half-time), who installs software components and performs testing and programming on an ongoing basis.
- A Systems Engineer (full-time), who monitors the overall network, assists with the setup and maintenance of all preservation caches, conducts network testing, contributes to programming tasks, and researches and recommends equipment for purchase.

These four positions have been funded through contracts and grants through 2011. As of January 2012, Educopia anticipates funding these staff positions through a combination of membership dues and consulting fees.

Additional staffing is conducted on an as-needed contract basis with consultants hired by the President and Executive Director of the Educopia Institute. Services include legal, accounting, and business consulting.

For a detailed overview of the Educopia Institute’s central and member staff resources please see the Educopia Institute Management Plan.

Staff Training

The Educopia Institute addresses complex technical and organizational infrastructure issues in a rapidly evolving field. As such, Educopia ensures that all staff members are provided regular opportunities to expand their knowledge through training and conference attendance.

The distributed staffing associated with MetaArchive Cooperative’s member institutions rely upon their individual institutions to provide them with adequate training. To facilitate this, the Cooperative provides direct training opportunities at its annual meeting and also offers ongoing online and telephone support. The Cooperative also published A Guide to Distributed Digital Preservation in 2010 and a Guide to the LOCKSS User Interface in 2011 to provide open documentation about running and participating in Private LOCKSS networks. These serve as another training resource for our network.

Financial Sustainability

Business Planning

The Educopia Institute has engaged in extensive business planning in its contractual and grant work with the National Digital Information Infrastructure and Preservation Program (NDIIPP) and the National
Likewise, any equipment purchased on behalf of the purchased equipment would be donated to the member institution, not held as assets of Edúcopia. Individual institutions may apply for technical and financial assistance with the restoration of a member's servers, software, and collections in the event of catastrophic loss. In such circumstances, the purchased equipment would be donated to the member institution, not held as assets of Edúcopia. Likewise, any equipment purchased on behalf of its programs, such as disks and/or servers added to

The formation of the 2011-2013 Strategic Plan was a long-term process that was conducted throughout 2009 with a contract specialist in non-profit strategic planning. It combined feedback and directions from the MetaArchive Cooperative committees and Edúcopia’s Executive Director and President. The formal 2011-13 Edúcopia Institute Strategic Plan was finalized and approved by the Board of Directors in 2010.

The Executive Director of the Edúcopia Institute meets twice annually with the Board of Directors on progress toward achieving the Strategic Plan, current revenue projections for both MetaArchive and Edúcopia Consulting, new and diverse funding opportunities, and advises on new directions for the organization. The Executive Director and Board of Directors is jointly responsible for drafting a fund development plan based on the strategic objectives outlined in the strategic plan to address both short- and long-term funding strategies, identify potential funders, and establish a resource development timeline.

Financial Processes and Procedures

The Edúcopia Institute budget is approved by the Board of Directors. As a 501(c) 3 nonprofit organization, the Edúcopia Institute is required to file an annual tax return to the Internal Revenue Service. Edúcopia has contracted with an accountant to maintain financial records and to produce reports for review by the MetaArchive Cooperative Steering Committee (Financial Plan) and the Edúcopia Institute Board of Directors (Budget). Grants and contracts with federal agencies have been managed to date through the member institutions that lead and subcontract with those entities. Expenditures made from the Edúcopia Institute budget require the approval and signature of the Board Chair, the Treasurer, and the Executive Director. The Treasurer of the Edúcopia institute informs the Board on risk, benefit, investment, and expenditures related to the organization’s finances.

Funding Sustainability

The Edúcopia Institute’s diverse funding structure is designed to provide for the basic expenses related to the function of its current and future programs and to maintain a low overhead for the services it provides. It accomplishes this by distributing technical and organizational work across its program membership whenever this is possible. Membership fees are intentionally set at an affordable rate for member institutions and are used to insure that the operational and administrative costs of operating its programs are met, including hosting membership meetings, workshops, trainings, and equipment. It is projected that its current program, the MetaArchive Cooperative, will be self-sustaining by January 2012. There will be a continued effort to keep membership fees low through supplementing this work with Edúcopia Consulting revenue. To date, the Cooperative has been highly successful at generating consulting revenue. Beyond 2012, the goal is for any new sponsored funding from federal and private sources will be put in place to continue supporting research development efforts for improving its various programs. The Executive Director will continue to work with the MetaArchive Cooperative Steering Committee and the Edúcopia Institute Board of Directors to monitor and bridge gaps in funding and pursue opportunities to enhance current activities.

Risk of Capital Assets

As a decentralized organization, Edúcopia aims to ensure to the fullest extent possible that all material assets used in its programs belong to the member institutions; Edúcopia does not seek to own assets. Individual institutions may apply for technical and financial assistance with the restoration of a member’s servers, software, and collections in the event of catastrophic loss. In such circumstances, the purchased equipment would be donated to the member institution, not held as assets of Edúcopia. Likewise, any equipment purchased on behalf of its programs, such as disks and/or servers added to
the MetaArchive network to expand its capacity on an as-needed basis, is donated in-kind to the member institutions.

Contracts, Licenses, and Liabilities

Data Liabilities

The only component of Educopia that is open to liabilities is the MetaArchive Cooperative program, via data risk and copyright issues. The risk of data loss in the network is low because all preservation sites serve as joint custodians of ingested and preserved content. The content is distributed across multiple caches, such that each file is replicated at least seven times in the network and stored in a geographically distributed manner. Members acknowledge that the MetaArchive, like other technology-based efforts, is a “fail-safe” method and cannot guarantee the preservation and migration of materials. Each member institution agrees in the Membership Agreement to hold full responsibility for protecting their own content through alternate means beyond those copies deposited in the MetaArchive Preservation network.

The MetaArchive Cooperative strives diligently to comply with copyright law. The MetaArchive network is a “Dark Archive” and therefore is not accessible outside of preservation routines and requirements. It is only available to Cooperative members for purposes of preservation and to replace an originating institution's local files when necessary. Each originating institution agrees to bear responsibility for resolving copyright and intellectual property issues locally in the Membership Agreement.

Conclusion

As Educopia grows and evolves, its staff and program members will continue to systematically plan for and document the criteria that ensure the sustainability, performance, and accountability of the organization and its affiliated programs.

Notes on this document

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