

LOVEBYTES MEDIA ARCHIVE PROJECT BUSINESS CASE

1. Executive Summary

Lovebytes currently holds an archive of digital media assets with a unique cultural and educational value. Representing 19 years of the organisation's activities in the field of digital art, the Lovebytes Media Archive is a rich historical record of emerging digital culture at the turn of the century. It contains original artworks in a wide variety of formats, video and audio documentation of events alongside websites and print objects.

These assets are a valuable historical record of the rapid development of digital and media based arts and comment from practitioners. However, this archive is currently unsupported and at risk.

This Business Case identifies what needs to be done to preserve the archive and what resources this will require. It is specifically formulated as the basis from which to apply for funding for the '*Lovebytes Media Archive*' [LBMA] and we anticipate it being of interest to heritage, research and arts sectors.

The Business Case has been developed along research which identifies best practice and makes recommendations for capturing, cataloguing and preserving the material.

2. Strategic Vision

Lovebytes is an arts organisation which provides a platform for digital art by supporting and promoting experimental new work and encouraging innovation and risk-taking in the production and exhibition of digital art in all its forms. We support established and emerging artists with commissions, exhibitions and events and through our educational projects, we encourage people of all ages to explore the creative potential of digital technology and digital culture.

We believe that digital art should be regarded as a highly relevant art-form for today's society; being uniquely intertwined with digital culture and often reflecting on important issues and challenges which digitalisation raises for society. Since Lovebytes was established, there has been a huge growth in interest around the creative and social aspects of technology, developing from new media arts practice, arts activism, musical subcultures and niche areas of academic interest to become the global cultural force it is today, proliferated through the internet. However, despite this, digital art is still surprisingly under represented by the arts establishment and often sidelined and misunderstood.

As independent digital art curators, we aim to promote a deeper understanding of creative digital practice and create arts experiences that stimulate audiences with opportunities which encourage everyone to engage with digital culture and develop their own creative skills. Lovebytes has demonstrated how digital art can attract new audiences to the arts, which has been documented and evaluated internally and independently. We believe digital creativity and the arts can also be a gateway to understanding key concepts in science, technology, engineering, art and maths and our strategies reflect the eclectic nature of today's audiences; forging new collaborative partnerships between arts and cultural sector, education, technology development and the creative digital industries.

We aim to propose Lovebytes Media Archive Project to funders and partners as an exemplar digital-born archive project which attempts to capture preserve and represent the history of Lovebytes as a valuable record of early international digital arts practice at the turn of the century. This will create a stable digital archive and make this material available for general public interest and education.

Through this process, we will investigate digital archivism as a creative process, and specifically how digital preservation techniques may be used to capture and preserve the

curatorial shape and context of arts festivals. We will explore the creative uses of metadata in the development of experimental interfaces for access, using ready-made, free and accessible tools for transcription dissemination.

3. Background, Context and Status

“Artists' increased use of multi-media, digital, and internet media since the 1960s has called into question the conventional strategies by which society preserves, cares for, and redisplay cultural artifacts created with or on ephemera media formats. While the most obvious vulnerability of new media art is rapid technological obsolescence, the study of its other aspects that defy traditional conservation—including hybrid, contextual, or 'live' qualities—has provoked investigation into new strategies for preserving conceptual art, performance, installation art, video art, and even to a limited extent painting and sculpture.

The preservation of new media art offers special challenges and opportunities. Whereas scientific data and legal records may be easily migrated from one platform to another without losing their essential function, artworks are often sensitive to the look and feel of the media in which they are embedded.”

New Media Art Preservation (http://en.wikipedia.org/wiki/New_media_art_preservation)

Over the past 19 years Lovebytes has amassed a collection of digital media assets which represents a valuable record of the development of international digital arts culture at the turn of the century. The archive contains documentation of key events from the Lovebytes International Festival of Digital Art in Sheffield, including recordings of talks and exhibitions which capture the perspectives and opinions of leading creative producers working in what was an emerging field at that time. The collection also includes specially commissioned original artworks, many of which are important and groundbreaking pieces commissioned by Lovebytes and created by both established artists and emerging artists, many of whom have gone on to become internationally recognized and award winning artists.

As a result of the 2011 Arts Council NPO funding review Lovebytes, like many other UK based digital arts organisations, lost its regular organisational core funding and subsequently these assets are now unsupported by any stable body or institutional repository. These assets are currently not accessible as a resource and are at risk from decay, damage and obsolescence. If we don't act now to preserve them this valuable resource will remain inaccessible and there is an increasing risk from loss or damage. There is also an opportunity to capture the curatorial knowledge of the company directors in order to interpret and present this material for current and future generations.

In June 2013 Lovebytes was awarded funding from SPRUCE, a JISC-funded project which supports digital preservation activities in UK arts organisations, libraries and museums. The SPRUCE award enabled Lovebytes to devise and test a digital preservation plan through auditing, migrating and stabilising a representative sample of material from the archive. It has also allowed us to develop this Business Case, which identifies recommendations for preserving the archive and making it accessible for the benefit of current and future generations.

4. Digital Collection Audit

We have undertaken an audit and stabilisation of a representational sample from the Lovebytes archive, which has enabled us to begin cataloguing items, make risk assessments and develop preservation strategies for a range of media formats.

This audit will inform the next phase of preservation and give a more accurate picture of the task in hand.

The audit shows that the collection contains 20 websites, 130 hrs of video, 800 photographs,

60 original digital artworks, along with pdf and text files, digital design layouts, publicity and press images.

These are currently held on approximately 500 physical digital storage items, including Hard Drive, DV video tape, DAT, Audio CD, CD ROM, DVD ROM and a variety of magnetic storage formats such as SyQuest, ZIP, JAZ and DVD RAM cartridges alongside a small collection of physical objects which include photographic transparencies and a collection of print objects on paper, card, vinyl and textile.

5. Intellectual Property Issues

Lovebytes holds legal rights to exploit the majority of the material in its archives. However there are some items for which we have limited licenses and searches are required for paper versions of existing copyright agreements to establish what rights exist and begin negotiations with the owners. Generally copyright of original artworks remains with the artist and Lovebytes holds licenses to distribute these universally in digital formats. Research is required to gain clearance for use of video/audio performance recordings.

Once IP searches are complete and agreements are in place, the Lovebytes directors will begin the process of cataloging, migrating, stabilising and disseminating material, utilising available global and 'cloud based' services where possible, to give open access to a selection of archive material whilst also creating and maintaining a localised Master Archive. The directors will seek to identify an institutional partner, who can preserve and sustain the archive in perpetuity.

6. Digital Preservation Risks

The assets are currently open to a number of risks. If they are damaged or lost this would have an impact not only on Lovebytes' legacy but would also be a loss to the UK's cultural heritage.

Risks include:

- . Storage and backups

The need to update storage media and ensure backups are in place are perhaps the most critical part of the Lovebytes Media Archive Project. The assets could be irretrievably lost due to the corruption of files, damage to storage media or the inability to read obsolete media if we don't act to stabilize and/or migrate data as soon as we can.

The majority of the material is existing in digital format and is to be managed as in its found state. Whilst this is predominantly digital born it requires consolidating into a manageable format to be preserved and used for access.

It is also important to recognize that digital artworks and/or the ability to show them may be lost if they are not recompiled or migrated.

An example of this issue became apparent in our research for the SPRUCE Award; we investigated artworks created for the Digital Space CD Rom in 2000, specifically Adrian Ward's 'Visual Toys'. This work was created in Macromedia Director and is no longer viewable due to obsolete file formats and operating system requirements. The source files for the artwork still exist, but even these are stored upon an obsolete storage medium. This work will be lost if we don't act. There are opportunities to extract the artwork from the CD Rom or the artist could recompile it to work with current operating systems.

Lovebytes was the first digital arts Festival in the UK, starting with a 1 day event in 1994. As such the story held within this media shows how artists started creating simple hypertext works through to large scale interactive installations where audiences can control and

become part of the artwork.

The history that makes up the archive are part of our shared heritage and we need to address the best approach to securing this for future researchers and/or audiences.

Key risks for data are:

- . Some file formats, storage mediums and the equipment required to read files are at risk of becoming obsolete and costly to maintain.

- . The appropriate combination of hardware and software might not be available to recreate an installation or exhibition of artwork. These works might need to be emulated or reinterpreted.

- . Some assets are stored on media such as CD Rom, DVD, DV or DAT tape and are at risk of decay or damage.

- . Website structures are difficult to transfer from server to server and need to be rebuilt and maintained to remain accessible online.

. Cataloguing and Auditing

A complete audit and subsequent cataloguing of the assets is essential to allow the identification and location of items easily, especially if the archive is eventually housed outside of Lovebytes.

In our audit, we identified a considerable amount of assets, both digital and actual. Whilst many tapes and CDs are labeled, many of the paper items are stored in a more ad hoc manner and there is no system identifying data on old hard drives and storage media.

We also started to find a lot of previously forgotten correspondence, such as artist's original commission applications to Lovebytes, which would provide a greater understanding of the process of curation and artwork development. If the audit isn't completed, much of this work and the opportunity to include this deeper appreciation of the process will be lost.

We developed a naming system whilst researching the representation sample, which will be carried through to each representation of the asset; on file, tape or disc. Alongside the naming system, a prototype searchable database/catalogue has been established allowing items to be identified and found, as well as highlighting links between related assets, such as a video tape, a file and a transcript of the session.

We now need to continue and complete the audit and establish an efficient system for cataloguing existing and new assets to ensure the archive is robust.

. Accessibility / Understandability

Ensuring the Lovebytes Media Archive is a useable and useful research tool is vital to the success of the project. The ability to search and find connections between themes, artists or assets will enable students, artists, arts organisations and the general public to move through the archive and access what they need, easily and efficiently.

For example, an artist's profile would link to a transcribed video of a talk about the artist and their work, photographs of the artist and the work, installation sketches, audience' feedback and examples of print publicity for the event(s) involving the artist, giving a complete picture of the artist and artwork. Additionally, a deeper understanding of how this fitted with the development of digital media art, the curation of the festival and critical thinking at the time, could be accessed through links between themes in festivals and/or specific programmes of work.

Currently, although some video and photographic documentation is available on the web,

supplementary information to assist with interpretation and understanding of the work is not linked or reference-able in this way, meaning that the richness of the activity and historical context of events are lost.

7. Stakeholder Analysis

Stakeholder	Interest/stake
Lovebytes staff	Responsible for fundraising to deliver the Business Plan, storage of the archive and meeting accessibility objectives. Legacy, profile and management of the archive.
External Funders (Existing, Potential)	Evaluation. Advocacy. Examples of best practice in digital preservation and innovative approaches to providing access. Delivering projects objectives.
Donors (Artists and Curators)	Portfolio and profile, preservation and accessibility. Confidence that works will be displayed according to artist wishes. Potential to be supportive and good advocates for the project
Educational Institutions / Researchers	Accessible resources for researchers (professors, fellows, PhD), lecturers and students. Able to access collections and metadata easily and in a variety of ways, to enable re-use and analysis.
Local Authorities and Regional Agencies	Promoting local and regional Creative Digital Industries.
Arts organisations and institutions.	Potential custodians. Best practice and cost effective strategies for digital preservation of archives.
Public	Easy access to archive and interpretive material for general users.

8. Benefits Analysis

Lovebytes' website and archive are integral to the future and legacy of the organisation. They help to raise and maintain our profile, increase access for audiences and feed into our fundraising capabilities. They also feed into digital arts research practice.

These benefits are outlined below:

Generic or high level benefit	Detailed benefit description	Aligns with Institutional Objective
Digital preservation for internal organisational use.	<p>To create a record of previous activity to refer to and draw upon. Re-approaching themes and strategies is a valuable tool for informing and developing new ideas and tracing common themes.</p> <p>Legacy and profile.</p> <p>Lovebytes staff will develop knowledge of and skills in digital preservation.</p> <p>Set up systems to enable smooth documentation and preservation of future events and assets.</p>	<p>To collect, catalogue and preserve Lovebytes digital artifacts.</p> <p>To maintain and increase Lovebytes profile.</p> <p>To enhance opportunity to raise funding for new work.</p>

Creating a publicly accessible collection of data and records	To create an accessible online archive of digital artworks, documentation for use by students, academics, researchers and public interested in digital heritage and development of creative technology culture. To enable us to meet and widen our audience reach and the legacy of by making work accessible across the world via the internet.	To preserve and make broadly accessible archives for research and re-use, both locally and remotely.
Potential for enabling monetization of archives	Organising and presenting archive material for collectors editions, publications and paid for download alongside free access.	Opportunities for raising match-funding. Protecting artist's copyright. Promoting artist's work.
Enabling innovative methods for public engagement with digital archives.	Provide an accessible, open data archive, which can preserve themes, and linkages that reflect the original context of the material and curatorial intent. Enabling re-presentation and reuse of this material.	Improve perceived value of digital archives.
Education	Potential for using the database in an educational setting and/or to develop collaborative projects with, for example, Sheffield Children's Festival and or the University of Sheffield (Festival of the Mind).	Improve perceived value of digital archives. Increase audience for digital work and knowledge of this area.
Participation in the Digital Preservation Community.	Via Spruce, OPF, ZKM... and otherwise..?	Improve digital preservation. Networking. Knowledge sharing.

9. Recommendations

From the research undertaken in the SPRUCE Award and through the development of this Business Case we can now consider an overall strategy and seek resources required for preserving Lovebytes assets.

Key Recommendations:

> Source Funding

We now need to develop a budget and research potential sources of funding for the project. This Business Case will be used as a foundation for applications for public and private funding, and will be tailored to suit specific funding application requirements.

In the first instance we are researching Heritage Lottery, Nesta Digital R&D Fund for the Arts and Arts Council of England as potential sources of funding.

> Identify partners

Whilst fundraising, we will also seek to identify an institutional partner, who can preserve and sustain the archive in perpetuity, whether this be through server space or storage of the assets themselves. They may be interested in being involved in assisting the archiving process. This might be via help from PhD students for example.

We will contact the Wikimedia Foundation with a view to sustainable options for preserving digital, cultural heritage focusing on early creative and cultural practise around the turn of the century.

> Preserve the assets

In the first instance, we need to build upon the groundwork started through the SPRUCE Award research which will underpin any additional development work and secure the future of the archive.

. Backups, cataloguing and full audit

Initial work will be to undertake a full audit of all the assets and where possible assess the level of risk they are under from damage, corruption and/or obsolescence.

A backup strategy will then be developed and implemented. This will build on the work carried out using the representational sample in the SPRUCE Award, extending this process for all the assets and will involve transferring assets to current standard storage media as well as recompiling from source material to meet current operating systems. We will start with items that are most at risk and then continue a thorough and methodical backup process to secure and to guarantee the stability of the archive.

Whilst auditing and backing up the assets, they will be catalogued using the naming system developed in our research

. Intellectual Property searches and clarification

Lovebytes holds legal rights to exploit the majority of the material in its archives but we need to assess existing copyright agreements to establish what rights exist and begin negotiations with the owners to gain clearance for use of video/audio performance recordings outside of these agreements.

> Implement the Lovebytes Media Archive Project

Whilst the digitization, cataloguing and backup of the assets is being completed, we need to devise a user friendly, accessible web based structure to allow accessibility and audience research, linking items and creating connections between themes. This has already been initiated by Mark Osbourne, who has helped us identify best practice in approaching this.

In addition to the assets we already have, we plan to transcribe video interviews, panel sessions and talks where possible to increase access, usability and links.

Throughout the process we will identify and develop robust systems and procedures for the preservation of new and existing media for future assets and events, in order to develop efficient methods of storing and accessing documentation and create a living archive.

Once the archive is starting to take shape, it will be tested and evaluated with a wider group. Additionally we will invite the Lovebytes community (artists, audiences, partners and visitors) to provide any additional artifacts they are happy to share – photographs or video for example.

> Research the potential for public launch of and participation with the archive

We would really like to involve the Lovebytes community in the archive, as well local communities, young people and families. This may develop as part of a funding application or as a separate project. It could involve re-presenting exhibitions from the past, talking to artists

about their journey between Lovebytes and now and getting people involved in cataloguing, archiving and finding pathways through the work. We would also like to commission artists to use the archive to create new works from the data.

> Identify the key resources required

. Hardware and software

The main hardware requirements for the project relate to hard drives and storage media, which needs to be housed in secure and stable environments. We also need to be aware that this is a long term issue with the need to implement regular refreshment cycles to copy on to new current media every three to five years.

There is also a need to access data from obscure/obsolete drives and cartridges, and this process will require technology which is able to do this.

We will need licenses for current versions of software in order to recompile/restoring work and may also need to access obsolete technologies for the re-presentation of work for documentation or exhibition purposes, Replay provide vintage video game consoles and classic computers for this purpose. <http://www.replayevents.com>

Additionally we will require server space to host the archive and websites, as well as physical storage space where we can house the assets and the backups of the archive.

. Staff

We need staff for cataloguing and auditing the assets, digitisation and back ups of the data and transcription of video footage as well as developers with expertise in programming archives and a designer to create the interface.

If we can access funding for public workshops and events to engage people in Lovebytes heritage and archive, we will need event production staff, workshop leaders and volunteers as well as artists to undertake archive commissions.