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PERSONAL DIGITAL ARCHIVES: STATE OF THE ART GUIDELINES IN NORTH AMERICA, AUSTRALASIA AND EUROPE

Abstract

Purpose: The purpose of this article is to analyze the good-practice projects and guidelines about personal digital archives produced by organizations, institutions and other entities in North America, Australasia and Europe.

Method/approach: The analysis method builds on the literature review and on the analysis of selected sources focusing on official handbooks and websites for personal digital archiving.

Results: In 2023, digital personal archives were reconfirmed as a critically endangered category and attention to the issue was limited to the English and Dutch-speaking world. Citizens in many countries do not have an online reference point, such as institutional websites of libraries and research centers, where they can request and find information on how to manage their personal digital archives.

Conclusions/findings: Although almost everyone today produces digital documents, experiencing their loss or difficulty in retrieval, the possible solutions related to the management and preservation of one's digital materials are not yet fully understood or considered. Research centers and public libraries should bring a greater attention to the problem and spread the knowledge based on the results already produced by international organizations, that will arouse the interest of citizens in some accessible security measures.

Keywords: archives, digital archives, personal archives, personal memories, personal digital archives.

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1. INTRODUCTION

In recent years the digitization of society has considerably accelerated, revolutionizing our daily lives in both private and working life, and making electronic devices ubiquitous and indispensable to every human activity. The shift in documentation creation from an analogue to a digital context has had the primary consequence of contributing to an unprecedented proliferation of personal information. In fact, in the digital era, unlike in the analogue era, information is always first transcribed and then transmitted, revealing the centrality of documents, and giving rise to a social, anthropological, and technological transformation that philosopher Maurizio Ferraris, professor of Theoretics at the University of Turin, has defined with the term dochumanity (Ferraris, 2021).

However, the ease with which digital documents can be created raises crucial questions about the durability and integrity of the data itself, and how to deal with the rapid obsolescence of the digital tools used to create and manage it. Indeed, the accessibility of digital objects is inextricably linked to the technological context in which they were conceived, and therefore to the hardware and software infrastructure, as well as to the people with the skills to maintain and use them.

The growing awareness of the fragility of digital information and the concern for its long-term preservation has led professionals to recognize that active and well-thought-out measures need to be taken if we want to continue to benefit from the opportunities offered by digital objects and tools.

Surfing the web today, it is easy to come across sites of national and international institutions and organizations dedicated to the preservation of digital cultural heritage and documentation produced by public administrations worldwide. However, it is not only the administrative bodies of each country or prominent personalities who produce digital documents that need to remain accessible and reliable over time, but also that of ordinary people. And it is ordinary people who are most at risk of losing their data, since they are often ill-equipped to deal with digital issues, if not completely unaware of them. This widespread incompetence jeopardizes

access to information not only for those who created it, but also for future generations who might be interested in studying our age.

The curiosity with which we look at our grandparents or parents' photographs, letters, and documents, for example, may be the same with which our children will look at ours. But these precious objects, today digital and no longer analogue, might be inaccessible and the loss of such an individual and collective memory could greatly harm the construction of an information base for generations to come.

If we think about it, it is a paradox: we live in the time of the data revolution and we might not leave any behind.

The following literature review will explore the broad area of personal digital archiving, shedding light on existing practices, emerging challenges, and possible future developments in this evolving field.

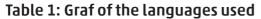
2. METHOD

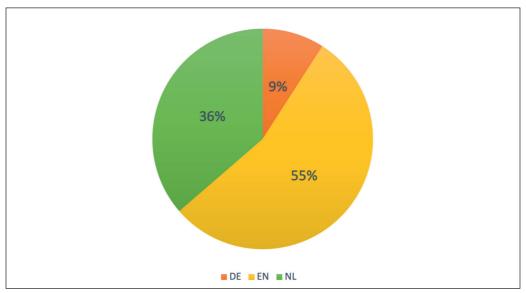
In the first part, this article aimed to explore and conduct a comprehensive review of the existing literature, examining scientific articles, academic documents and relevant online resources related to personal digital archiving. This phase enabled the identification of the state of art, key issues, and challenges in the field.

In the second part, the focus was on identifying and analyzing the most significant projects in the field of personal digital archiving, evaluating their effectiveness and comprehensibility for a non-specialist audience. Particular emphasis was placed on the ability of such projects to reach a wide audience, regardless of the users' technical knowledge, in order to assess their adoption on a wider scale.

The methodology of this research part focused on an in-depth analysis of websites available online in different countries specifically in America, Australasia, and Europe, to explore the landscape of projects related to personal digital archiving. The broad geographical scope of this survey allowed for a broad view of ongoing initiatives, highlighting cultural differences and variations in digital preservation strategies adopted by different communities.

However, despite efforts to include a wide range of geographical areas, the available information was particularly accessible and detailed for United States, United Kingdom, Flanders and the Netherlands, indicating that for many countries the issue of digital archiving has been almost non-existent or is still in its infancy.





Another aspect determined by the outcome of the research in geographical terms is the linguistic one (Table 1), where the English language has clearly prevailed over the others (55%), followed by the Dutch (36%) and German (9%). It is likely that the challenges encountered in researching material on personal digital preservation across various geographical areas were compounded by multiple linguistic barriers. These barriers include both the languages known to the researcher and the absence of established and equivalent terms for indicating personal digital archiving in other languages.²

Finally, the analysis of personal digital archiving web sites attempted to take into account the temporality of the information. Many of the re-

² The researcher's linguistic capabilities inevitably influenced the accessibility of information, as language barriers can limit the ability to navigate and comprehend resources in different linguistic contexts. Additionally, the absence of standardized terms for Personal Digital Archiving in various languages may have further hindered the identification and retrieval of relevant materials.

sources consulted presented data and approaches from almost ten years ago, highlighting the need to carefully consider the dating of information available online. In order to maintain the relevance and practicality of the conclusions, it was decided to exclude projects whose documentation was too old and to focus instead on more recent and current initiatives. This decision aims to provide a more accurate and timelier overview of emerging methodologies and practices in this context.

A personal digital archive is the aggregate of digital information that an

3. RESULTS

3.1 PERSONAL DIGITAL ARCHIVES: AN ENDANGERED CATEGORY

individual maintains for future uses (Sinn et al., 2017, 223), or in another world, is essentially a system of personal services and information objects that are created, received, and stored, and accessed by individuals through digital devices. Creating a personal digital archive is not confined to a select few; it's a privilege extended to everyone navigating the digital landscape. Typically, these archives consist of digitized analog materials and born-digital objects. This second category is certainly the most substantial and includes different types of documents, such as: emails, text messages, instant messages, photographs, video, music, voice recordings, medical records, business or study information and other writings, drawings, spreadsheets, presentation, bank statements, bills, taxes, personal websites, and social media etc. The materials that form these aggregations are not only intentionally crafted and stored but are just as frequently generated casually or even inadvertently. These archives include both documents "saved on a personal computer or disks and those share online and stored remotely by a third-party service" (Redwine, 2015, 7), a factor that expands the concept of the archive as never before. In particular, three types of personal information can be identified: the first type of personal information is data that is in the possession of the individuals themselves and for their own use; the second type of personal information is data that belongs to other entities, such as hospitals or banks, that manage in-

formation about the individual. In this case, it is not the individual who

directly controls this information, but the institutions or related entities that share it with them. The third type of personal information relates to personal experiences that are not directly owned or stored by the individual, such as information about websites visited, which may be recorded by third parties or stored in online archives (Alam, 2022, 4).

The category of *Personal Records* was introduced to the *Bit list* in 2017 with a classification of 'Critically Endangered', which was reaffirmed in the latest published report (Digital Preservation Coalition, 2023, 54–55). It is also emphasized that the risk level can easily change from 'Critically Endangered' to 'Practically Extinct', which is the higher level of risk, in the presence of aggravating conditions, such as:

"Storage on portable media or poor storage; dependence on devices or processes; dependence on obsolete or proprietary formats; storage media out of warranty; single copies; inappropriate dependence on service provider; inappropriate encryption or password protection; lack of awareness or planning; loss or lack of documentation; over-abundance; inability to act in a timely manner; confusion over intellectual property; lack of digital literacy." (Digital Preservation Coalition, 2023, 54–55)

In the personal domain, there is a tendency to spread all the information across multiple systems, both because of the systematic marketing of new, increasingly sophisticated storage media, and a lack of knowledge about how the media themselves work. Storage mediums are not all the same but are typically characterized by very diverse technological features: some are magnetic, some are optic, and others are electronic. (Allegrezza, 2019a, 58). Moreover, more and more people are relying on cloud storage services, whose use is not so peaceful as it seems.

The uncontrolled use of repository systems gives rise to several problems. Firstly, it can cause the fragmentation of the document mass, which makes files untraceable: for example, we can no longer remember where we saved a completed document, which means that searching takes longer. Secondly, it is not certain that the information contained in the storage is still readable, due to the obsolescence both of the software and formats

used to create it and the omission of migration and refreshing operations (Ali et al., 2022, 137–138).

Finally, what makes the situation worse is the absent practice of good discarding operations. As this type of archives is characterized by an over-accumulation of documentation, most individuals are forced to resort to the delete option and discard some of their valuable digital assets to free up space on both physical and cloud storage. Due to the fact that files have been saved and encrypted cryptically, i.e. the names assigned to them are not meaningful to their content (Allegrezza, 2021), the possibility of deleting or not finding documents of interest increases exponentially.

3.2 OVERCOMING THE PROBLEMS

People should maintain their own personal information authoritative for few reasons:

- Affective reasons: thanks to our archives, we can look back or review our personal history and past events, recalling our personal feelings (Sinn et al., 2011, 138). Affective factors do not only concern us, but also our family and friends who could inherit our archive.
- Legal and practical reasons: the archive can be seen as a practical tool, which provides evidence of the work and research carried out, necessary to conduct our daily lives (Alam, 2022, 3). In addition, some documents may have a legal function as evidence in particular for the heirs (Harbinja, 2023).
- Historical reasons: as personal archives are an important way for individuals to express their perspectives, they become sources of great value for research by current or future scholars (Redwine, 2015, 9).

For helping people to achieve this goal there is a discipline for dealing with problems connected with digital tools: Digital Preservation. This relatively young branch of knowledge can be defined as "the series of managed activities necessary to ensure continued access to digital materials for as long as necessary" (Digital Preservation Coalition, 2015). Practicing digital preservation and, more specifically, personal digital archiving means trying to keep own personal records authentic, reliable, intact and usable

(Kastenhofer, 2015). Threatening the long preservation of computer documents are mainly hardware or software obsolescence, data corruption, cyber-attacks, natural disasters, and human errors. For these reasons, Digital Preservation is an ongoing process that involves both technological and cultural challenges.

Whereas in analogue personal archives the archival intervention usually takes place after the death of the producing subject, in digital archives the attention to materials is no longer a consequent activity of production but coincides with it. The longevity of information is only guaranteed if criteria for change and risk management are assumed from the outset. The failure to implement effective technology watch will result in a potential loss of access to digital resources and higher costs (Digital Preservation Coalition, 2015).

The tools provided by a well-done digital archiving process help to reduce most of the technical and technological risks. The first step is to break down personal digital archiving into four basic phases: identify, select, organize, and save. Starting from this schematic overview encourage people to engage in different core digital operations such as replication, early action, open formats, selection, and evaluation.

Anyway, all these activities pass by the educational aspect. It is clear, therefore, that only through raising awareness and training people, we can acquire the essential knowledge to adopt secure, sustainable and future-oriented digital archiving practices.

But who may help people in that? Where can ordinary people find good information for managing their archives?

3.3 WHERE TO FIND INFORMATION ON PERSONAL DIGITAL ARCHIVING

At first glance, regulations in the matter of personal digital archiving appear to be inadequate if compared to the attention given to governmental digital archives. In fact, on the one hand, in the public sector we are assisting in consistent growth in the number of norms regarding the creation, management and preservation of digital objects, spreading awareness at all levels: from the public employer which creates the document to that which will store it in the deposit. However, on the other hand, substantial

progress has been made also in the private sector in the attempt to offer precious advice to people on how to preserve personal records. In the first decade of the 21st century, organizations such as the Digital Preservation Coalition (DPC) and projects such as "PARADIGM" or "Memory Lab," along with initiatives by the Library of Congress in the United States, inaugurated a season of significant efforts in the field of promotion and preservation of personal digital files. Within a short time, initiatives on the websites of libraries, universities and cultural organizations have doubled. Today, much information and advice on personal digital archiving can be found online in the form of webinars or short videos on you-tube or in the text sections of websites. These projects, available for free online, seek to help people in the creation, management, and preservation of their digital records. This part of the article will try to list and illustrate the most significant ones (Table 2) in North America, Australasia, and Europe.

Table 2: Most significant project about personal digital archiving

Continent	State	Project name	Language	Promotive structure(s)
North America	Indiana	Personal Digital Archiving	EN	Purdue University
North America	Washington D.C.	Personal Archiving	EN	Library of Congress
North America	Michigan	Digital Archiving	EN	University of Michigan
North America	Illinois	Preservation Self- Assessment Program	EN	University of Illinois Urbana-Champaign
Australasia	Australia, New Zealand	Personal digital archive toolkit	EN	National and State Libraries Australasia
Еигоре	ик	Digital Preservation Handbook	EN	Digital Preservation Coalition
Еигоре	Belgium	Archiefbeheer voor ontwerpers en bedrijven	NL	Vlaams Architectuur instituut
Еигоре	Belgium	Digital Repair Cafe	NL	meemoo, Flemish Institute for Archives
Еигоре	Belgium, Netherland	Tracks	NL	Network of cultural organisations
Еигоре	Netherlands	Leren Preserven	NL	Digital Heritage Network
Europe	Germany, Austria	meinDigitalesArchiv.de	DE	Nestor

3.3.1 LIBRARY OF CONGRESS

Personal Archiving is a project of the Library of Congress, the largest library in the world located in Washington, which has offered advice on manag-

ing personal digital materials since 2007, when there were few resources on the topic. Over the years, there has been an evolution of this advice, and today there is a vast repertoire of information (NDIIPP, 2013). The approach taken was consistently geared towards providing background information to give non-experts in the field ideas to start with. Therefore, the main goal is to actively engage the public by reaching out directly to people, both newbies and experts, and collaborating with other organizations in the cultural sector to assist in the development of their public outreach programs. People can find detailed but accessible information on how to deal with the preservation of digital photographs, audio, video but also e-mails, websites, blogs and social media.³

3.3.2 PURDUE UNIVERSITY

Purdue University's Libraries and School of Information Studies has dedicated a specific area of its website to a project called *Personal Digital Archiving*. It is a small guide to the basics of preserving and securing one's personal digital archives which is divided into four parts: "The basics", "Preservation by format", "Secure storage" and "Computer history". The language used is simple and common, suitable for a heterogeneous and often unexperienced audience.⁴

3.3.3 UNIVERSITY OF MICHIGAN

The University of Michigan Library has a *Digital Archiving* section on its website that provides guidance on organizing, archiving, backing up and preserving your personal digital files in a variety of media formats, including text, photos, audio, and video. The well-done and up-to-date guide is perfect for a non-expert audience as it uses simple but effective language. Also worth mentioning is the 'General Resources' section where people can find useful bibliographic references and downloadable online resources on the subject. These include a 2012 publication entitled *Preserving Personal Digital Files*, which is a downloadable guide from the University of Michigan Library to offer information about using digital preservation

 $^{{\}tt 3} \quad {\tt Website available: https://digitalpreservation.gov/personal archiving/?loclr=blogsig.}$

⁴ Website available: https://guides.lib.purdue.edu/PDA.

⁵ Website available https://guides.lib.umich.edu/c.php?g=992751.

best practices to keep your digital materials safe, so that you will be able to access them into the future (Sarah Wingo, 2012).

3.3.4 UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN LIBRARY

The *Preservation Self-Assessment Program (PSAP)*, created by the University of Illinois Urbana-Champaign Library, is not really a personal digital archiving project, but it offers interesting insights for individuals and staff in smaller institutions who need to assess and care for the materials in their collections. Specifically, it is an assessment tool that also contains significant teaching components on audiovisual, cartographic, paper, photographic and photomechanical materials, as well as the following inorganic materials: ceramics, glass, stone, and metal. As a kind of bridge between analogue and digital archives, this project can be useful for the long-term conservation of many now disused media such as CDs and DVDs, where personal digital information may have been stored. ⁶

3.3.5 NATIONAL AND STATE LIBRARIES AUSTRALASIA

The National and State Libraries Australasia (NSLA) is an incorporated association that brings together the national, state, and territory libraries of both Australia and New Zealand. The primary objective of their project *Personal digital archive toolkit* is to promote best practices in the management of digital documents generated within the private sector. Through collaboration and shared expertise, NSLA works towards enhancing the preservation and accessibility of digital content, fostering a collective effort among the libraries in the Australasian region. This website page, first published in 2017 and recently reviewed in March 2023, uses plain words, easily understandable even for an untrained eye. For more detailed information, it refers to the Library of Congress sites and to other related resources present on the NSLA site, such as articles and webinars.

3.3.6 DIGITAL PRESERVATION COALITION

The Digital Preservation Coalition (DPC) is a not-for-profit membership organization based in the United Kingdom that focuses on advocating and

⁶ Website available: https://psap.library.illinois.edu/.

⁷ Website available at: https://www.nsla.org.au/resources/personal-digital-archive-toolkit/.

supporting the long-term preservation of digital materials. Established in 2001, the DPC brings together a diverse range of institutions, including national and university libraries, archives, commercial organizations, and government agencies. Their primary mission is to raise awareness about the importance of digital preservation and to provide a collaborative platform for sharing knowledge, expertise, and best practices in the field. The Coalition plays a crucial role in fostering a community-driven approach to address the challenges associated with the long-term access and sustainability of digital content, in particular, thanks to their Digital Preservation Handbook. This quide is available for free on the DPC website and is intended for a wide and diverse audience, from those who are only beginning to consider managing digital materials to practitioners who have already accumulated considerable theoretical and/or practical experience. It is structured in sections, which simultaneously facilitate reading for both expert and non-expert audiences, allowing quick and easy access to all. Unlike other texts, this handbook is available not only in English but also in other languages, as Italian and French, factor that broadens the audience of possible users of the information.8 This document is really connected to the Redwine's report entitled Personal Digital Archiving (2015), which "aims to describe the issues facing individuals who want to preserve their digital objects, while providing recommendations for records creators and curators to take action" (O'Meara, 2017).

Surfing their website, one can under 'Collaborative Projects' discover the course titled *Novice to Know-How: Digital Preservation Skills for Beginners*, which is designed for individuals who are new to the subject. The course, part of The National Archives' innovative digital capacity building strategy, 'Plugged In, Powered Up,', initiates with a comprehensive introduction to digital preservation issues, outlining measures to tackle these challenges. Subsequently, it delves into more detailed discussions on potential workflows, addressing considerations, outlining necessary steps, and exploring technological solutions. Notably, there is a focus on highlighting

⁸ Website available at: https://www.dpconline.org/handbook.

⁹ Website available at: https://www.dpconline.org/digipres/collaborative-projects/n2kh-project.

free and user-friendly options, accompanied by demonstrations of various tools. The course content incorporates a blend of video presentations, textual information, and interactive quizzes. On average, participants typically take two to three days to complete the learning pathway.

3.3.7 VLAAMS ARCHITECTUUR INSTITUUT

The Vlaams Architectuur Instituut (VAi) is an organization based in Flanders, Belgium, dedicated to the promotion and preservation of architectural heritage. One of its notable projects is the management of archives related to architecture, called *Digital archive preservation* (*Digitaal archief bewaren*). Although their target audience is designers, the guidelines provided by the site may also be used to the general practice of personal digital archiving as the language and tone used are completely informal and easy to understand. The recommendations include the use of a central repository for all digital information to reduce the risk of data fragmentation, the protection of digital objects and the use of standardized file formats. For those wishing to broaden their knowledge, the site refers to two other projects: *Digital Repair Café* and *Tracks*. 11

3.3.8 MEEMOO, FLEMISH INSTITUTE FOR ARCHIVES

Digital repair café is a service of AIDA, a collaboration between Amsab-ISG, ADVN, AMVB, AVG-CARHIF, CAVA, Letterenhuis, VAi, Archiefpunt and meemoo, with support of the Flemish government, and now operated by meemoo, Flemish Inistute for Archives, which helps people capturing content and data from obsolete media. In the site can be find precious information about setup and workflow for inch 3.5 inch diskettes, 5.25 inch floppies, hard discs and jaz drives, magneto and optical discs, memory card etc. It should be noted that most of the schematic advice is given in English while the manuals and other overview content on the subject are in Dutch.

3.3.9 TRACK

Track is the result of a collaboration between several Dutch-speaking cultural institutes. It is designed like a suitcase that contains the tools art-

¹⁰ Website available: https://www.vai.be/advies/digitaal-archief-bewaren-1.

¹¹ See paragraph 3.3.8 & 3.3.9.

¹² Website available: https://automatic-ingest-digital-archives.github.io/Digital-Repair-Cafe/.

ists, arts organizations, and people in general need for the preservation of their own archive and/or collections. Among the good advice is that on discarding, which is often wrongly impractical in digital archives, since it simplifies document search and management. Track's suggestion is to plan a 'trash day', where you focus only on making digital classification neat and accessible. Moreover, the attention is also focalized on how to do checksum and how to manage passwords securely. The well-designed interface makes the user experience intuitive, effective and efficient: on Track's website it's easy to quickly find the information you are looking for.

3.3.10 NETWERK DIGITAAL ERFGOED

In 2017 the Digital Heritage Network in collaboration with the National Coalition for Digital Preservation (merged into the Digital Heritage Network in 2018), and Het Nieuwe Instituut originated a course called *Leren preserveren* (Learning to preserve). ¹⁴ The training is offered in two variants: the collective fee course and the self-taught one, which is free. Since both course versions are dedicated to employees of Dutch national cultural institutions who do not yet have a deep background in digital archives, the educational program is also excellent for ordinary people. The online course addresses the pressing need for digital preservation knowledge and skills within collection management institutions in the Netherlands and consists of three modules:

- a) The first module introduces the theme of sustainable access and the digital information object, illustrating its vulnerability.
- b) The second module presents which people and actors play a role in sustainable access to the collection and which tasks and responsibilities arise from digital heritage management.
- c) The third module gives advice on risk management and how to use the guidelines. Finally, participants are invited to try their hand at solving a digital problem.

¹³ Website available: https://www.projecttracks.be/overzicht-toolbox/digitaal-bewaren.

¹⁴ Website available: https://lerenpreserveren.nl/.

3.3.11 NESTOR

Since 2016 Nestor has been working intensively on the topic of 'Personal Digital Archiving' in Germany and Austria. Their meinDigitalesArchiv.de website provides tips on how to protect personal digital materials in the long term. The website provides practical advice on how to safeguard and archive your personal digital documents, with a specific focus on topics such as digital inheritance and metadata usage. Additionally, experiences of individuals of various ages who had the need to adjust their document preservation methods were shared. Thanks to these practices, they have experienced tangible benefits over time. The language used is very informal and easy to understand also for beginners.

3.3.12 BECOMING OUR OWN ARCHIVIST AND THE ROLE OF INSTITUTIONS

Free websites and online courses offered by national and international institutions are vital to the future of personal digital archiving. They help ordinary people find the right ways to create, manage and preserve their digital heritage. Using simple and accessible language, these resources are easy to understand even for those unfamiliar with the subject. Their role in educating the community about the risks associated with the digital environment should not be underestimated, but rather strengthened. Dissemination of clear and accessible information is essential for raising public awareness and promoting safer and more effective practices in the area of personal digital archiving.

Discovering the world of personal digital archiving could become a game-changer for many everyday people but in the realm of private archives, challenges arise because the commitment required is voluntary rather than mandatory, unlike public archives governed by specific regulations and guidelines. That's why individuals must grasp the reasons behind investing their energies in this endeavor, understanding that putting in extra effort is not a waste of time but rather an aid for subsequent moments. With commitment and the use of straightforward guidelines, we, as citizens, will not be simply passive users and but will become our own archivists.

¹⁵ Available at: https://meindigitalesarchiv.de/.

Managing our own digital files correctly produces immediate benefits in our daily lives as we become less worried about data fragility, data loss and data reliability and the significance of this proactive engagement extends also to the facilitation of accessibility for future generations. By orchestrating the management of our digital archives, we not only simplify processes for heirs but also contribute to a streamlined and organized legacy, particularly in legal, financial, and historical contexts. The impact of personal digital archiving catalyzes a broader narrative wherein cultural institutions can seamlessly integrate themselves into the preservation of collective digital histories. This harmonious collaboration ensures a more comprehensive and accurate documentation of both personal and collective memories in the ever-evolving digital era.

However, there is still a long way to go. For Bit List 2023, the preservation of personal records is "a public awareness campaign issue and more tools need to be made easily available for people to be able to better preserve their own digital content" (Digital Preservation, 2023, 55). People are progressively recognizing the complexity of managing their digital archives and realizing that, to meet this challenge, they need archival skills, something not essential in the analogue age. It is within this need that the role of archivists must be placed, as they are now called upon to provide secure and reliable answers as never before. This demand offers significant opportunities for the development of the discipline: professionals in the field are responsible for initiating differentiated training courses to impart knowledge and skills to a wide audience, ranging from primary school children to senior citizens, aiming to create a mass "archival literacy". An effective training program should start by providing basic archival knowledge, including concepts such as digital document, digital file, archival record, digital document life cycle, and characteristics of personal and family archives in a digital environment (Allegrezza, 2019, 71–72). As archiving deals with history and, in the modern era, more and more with technology, it should be easily integrated into social studies curricula (Dickson & Gorzalski, 2013) as well as the technological ones. This integrated approach ensures that students gain not only an understanding of the history and significance of preserving

personal information but also the technological skills required to address the challenges of digital archive management. By doing so, it is possible to create a bridge between the past and the present, equipping individuals with the skills to effectively manage their digital information, thus contributing to the preservation of historical and cultural memory in contemporary society. These training initiatives are essential to raise the general level of archival knowledge in a changing digital environment but also to change people's perception of the archival profession (Patterson, 2016). Through educational initiatives, collaborations with the public and the adoption of innovative technologies, archivists can demonstrate the relevance of their efforts in the digital context. By working with the community, archivists can emphasize the value of digital archives as vital resources for understanding history, culture, individual and collective identity. This way, digital archives become a fertile ground for transforming the perception of archivists from passive custodians to active quardians of the global digital memory (Hawkins, 2013).

What we can observe is that, on the one hand, education on personal digital archiving in the United States is not only provided by the Library of Congress but also actively involves universities. This trend reflects a widespread recognition of the importance of personal management of digital documents and the need to instruct individuals on how to effectively preserve their digital assets. The involvement of universities in this educational effort highlights a holistic and collaborative approach to addressing the challenges of digital preservation. The education provided by both the Library of Congress and universities contributes to overcoming the information gap, enabling individuals to acquire essential skills for responsibly managing and safeguarding their digital archives.

On the other hand, in Europe, as well as in Australasia, the predominant focus on personal digital archiving appears to lean more towards cultural organizations dedicated to heritage rather than universities. Unlike the United States, where universities actively participate in educating individuals about personal digital archiving, the European world seems to rely more on cultural institutions that specialize in preserving and promot-

ing cultural heritage. This divergence in approach suggests that if Europe integrates these pinciples into academic curricula, more citizens will be prompted to proactively address the challenges and opportunities associated with management of their digital materials. This collaborative effort in educational institutions could foster a culture of responsible digital stewardship, ensuring that the skills and knowledge required for effective personal digital archiving become integral parts of academic learning.

3.4 LINGUISTIC AND OTHER CHALLENGES

It's worth noting that a significant number of countries have yet to formulate guidelines for their citizens. The linguistic differences in the realm of personal digital archiving pose a significant challenge. The majority of guidelines and advice is primarily provided in English, reflecting its predominant position as the *lingua franca* in digital and scientific communications. On the one hand, this approach secures a wide audience but on the other hand it should not dissuade national cultural organizations from providing guidelines in their own native language.

On this route in Europe there is a noteworthy presence of resources from Dutch institutions provided in their own language which offers a model for overcoming the problem of linguistic barriers, ensuring that a broader range of people can benefit from guidance on managing and preserving their digital archives.

Despite the case of Dutch speaking territories, linguistic diversity remains a challenge, and progress towards greater availability of resources in many languages is crucial to ensure fair and inclusive access to information in this constantly evolving context. When a culture embraces a concept, it often tends to create specific vocabulary to define it. This process reflects the dynamic nature of language and its ability to adapt and grow in response to the needs and experiences of the community. The adoption of a concept in a culture is frequently accompanied by the creation of unique terms and expressions that fully capture the meaning and specific context of that concept within that community. This lexical richness contributes to the precision and complete expression of cultural ideas and practices. This phenomenon was highlighted, for example, by Christian Kuhne, a student

from Germany, who pointed out that the lack of attention to the issue has meant that there was no official German translation of the term 'personal digital archiving' (Kuhne, 2016, 9), creating confusion in the treatment of the subject. Since Kuhne's statement Germany, thanks to the project of Nestor, made significant progresses creating a definition and guidelines which will help German speaking countries with a landmark on the matter of personal digital archiving.

To conclude, successfully managing personal digital archiving requires not only initial efforts but an ongoing commitment over time. This challenge becomes apparent when considering the tendency of institutions, even the most authoritative ones, to address this issue for only limited periods. Currently, many of these institutions (even Digital Preservation Coalition) present websites with outdated information, broken links, or even errors. In such a dynamic and ever-evolving context like personal digital archiving, consistency in updating information is of vital importance.

In the specific field of personal digital archiving, the need to maintain a constant flow of updated information is even more critical. Unlike other sectors, practices, tools, and technologies in the realm of personal digital archiving can evolve rapidly. Therefore, it is essential that online resources not only provide an initial overview but also undergo a continuous process of review and update.

Experience shows that the presence of errors, broken links, and outdated information can significantly compromise the credibility and utility of resources dedicated to personal digital archiving. A meticulous and continuous approach by highly qualified individuals is necessary to ensure that these resources are reliable, accurate, and aligned with the latest developments in the field.

In summary, the sustainability of personal digital archiving initiatives requires a constant commitment to the care and updating of online resources. Only in this way can reliable, up-to-date, and relevant information be provided to the public, contributing to a better understanding and adoption of personal digital archiving practices.

4. CONCLUSIONS

This article has attempted to give an overview of the subject of personal digital archiving through an analysis of existing literature, what is meant by personal digital archives, what documents they consist of, who produces them, what are the problems in this area and why it is worth preserving our data have all been defined.

Subsequently, the digital preservation and good practices in digital archiving were presented as the only way to overcome digital issues and make our information authoritative and long-lasting. It has been recognized that the creation and curation of personal digital archives not only contributes to preserving individual history, but also has practical implications: it simplifies access for heirs and cultural institutions interested in preserving these records, giving them reliability and durability.

The need for widespread education on digital content management for ordinary people was highlighted too and was connected with analysis of existing handbooks, websites, and guidelines accessible for free online. Significant projects in different countries, focusing on North America, Australasia and Europe were thoroughly explored.

It was then noted that there are currently several well-made guidelines and websites dedicated to this topic on an easy-to-understand form for a non-professional audience. However, the lack of updated resources, the discontinuity of efforts dedicated to personal digital archiving and the absence of guidelines in many languages - with English and Dutch prevailing in Europe - underscores the need for constant and international commitment to ensure a fair and inclusive access to crucial resources and ensure the preservation and accessibility of these valuable digital archives for future generations.

REFERENCES

Alam, N. A. R. (2022). The Use of Personal Digital Archiving For Effective Learning During Pandemic Covid-19. *Library Philosophy and Practice*. Retrieved at: https://digitalcommons.unl.edu/libphilprac/6803 (accessed 14.12.2023).

- Ali, I. & Warraich, N. F. (2022). Modeling the process of personal digital archiving through ubiquitous and desktop devices: A systematic review. *Journal of Librarianship and Information Science*, *54*(1),142–143. Retrieved at https://doi.org/10.1177/0961000621996410 (accessed 14.12.2023).
- Allegrezza, S. (2021). Mettere ordine negli archivi digitali personali: cominciamo dalle regole per la denominazione di documenti e fascicoli. *Archivi*, *XVI*(2), 67–97.
- Allegrezza, S. (2019a). THE FUTURE OF OUR PERSONAL DIGITAL MEMORIES: IT'S TIME TO START THINKING ABOUT IT. *Atlanti+*, *29*(1), 55–65. Retrieved at: https://doi.org/10.33700/2670-4579.29.1.55-65(2019) (accessed 14.12.2023).
- Allegrezza, S. (2019 b). THE IMPORTANCE OF PERSONAL AND FAMILY DIGITAL ARCHIVES FOR A NEW PERCEPTION OF THE ARCHIVAL DISCIPLINE. *Atlanti*, 29(2), 58–76. Retrieved at: https://journal.almamater.si/index.php/Atlanti/article/view/317 (accessed 14.12.2023).
- Copeland, A. J., & Barreau, D. (2011). Helping people to manage and share their digital information: A role for public libraries. *library trends*, *59*(4), 637–649. https://hdl.handle.net/1805/4555 (accessed 15.12.2023).
- Dickson, E., & Gorzalski, M. (2013). More than primary sources: teaching about the archival profession as a method of K-12 outreach. *Archival Issues*, *35*(1), 7–19. Retrieved at: http://www.jstor.org/stable/24589907 (accessed 15.12.2023).
- Digital Heritage Network. (2021). *Leren Preserveren*. Retrieved at: https://lerenpreserveren.nl/ (accessed 14.12.2023).
- Digital Preservation Coalition. (2023). The Global List of Endangered Digital Species: The Bit List 2023. Retrieved at: https://www.dpconline.org/doclink/bitlist-2023/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzl1NiJ9.eyJzdWIi-OiJiaXRsaXN0LTIwMjMiLCJpYXQiOjE2OTg4NjE0NjgsImV4cCI6MTY5OD-k0Nzg2OH0.W4n0gRdWxEkCp1idvjZA6kWlr_VVCDTzQa19P3sE-u0 (accessed 15.12.2023).

- Digital Preservation Coalition. (2023). *Novice to Know-How: Online Digital Preservation Training*. Retrieved at: https://www.dpconline.org/digipres/prof-development/n2kh-online-training (accessed 15.12.20230).
- Digital Preservation Coalition. (2015). *Digital Preservation Handbook*. 2nd ed. Retrieved at: https://www.dpconline.org/handbook (accessed 15.12.2023).
- Ferraris, M. (2021). Documanità. Filosofia del mondo nuovo, 1st ed. Bari Roma, Laterza.
- Hawkins, D. T. (2013). *Personal Archiving: Preserving Our Digital Heritage*, 1st ed. Medford, Information Today Inc.
- Harbinja, E. (2023). *Digital Death, Digital Assets and Post-mortem Privacy*. Edinburgh University Press. Retrieved at: http://www.jstor.org/sta-ble/10.3366/j.ctv32vqmk8 (accessed 15.12.2023).
- Kastenhofer, J. (2015). The logic of archival authenticity: ISO 15489 and the varieties of forgeries in archives. *Archives and Manuscripts*, 43(3), 166–180. Retrieved at: http://dx.doi.org/10.1080/01576895.2015.10 74085 (accessed 15.12.2023).
- Kuhne, C. (2016), Personal Digital Archiving. Anforderungen und Lösungsansätze für die private digitale Archivierung persönlicher Unterlagen. Potsdam, Potsdam University of Applied Sciences, urna:nbn:de:kobv:525-13212.
- Library of Congress. (s. d.). *Personal Archiving*. Retrieved at: https://digitalpreservation.gov/personalarchiving/?loclr=blogsig (accessed 15.12.2023).
- National and State Libraries Australasia. (2023). *Person al digital archive toolkit*. Retrieved at: https://www.nsla.org.au/resources/person-al-digital-archive-toolkit/ (accessed 15.12.2023).
- Library of Congress. (2013). Perspectives on Personal Digital Archiving, National Digital Information Infrastructure and Preservation Program. Retrieved at: https://www.digitalpreservation.gov/documents/ebook-pdf_march18.pdf (accessed 15.12.2023).
- Nestor. (2023). *meinDigitalesArchiv.de*. Retrieved at: https://meindigitalesarchiv.de/ (accessed 15.12.2023).

- O'Meara, E. (2017). Personal Digital Archiving: DPC Technology Watch Report 15-01 Digital
- Preservation Coalition, DPC Technology Watch Series by Gabriela Redwine. *The American Archivist*, 80(1), 240–243. Retrieved at: https://doi.org/10.7207/twr15-01 (accessed 15.12.2023).
- Patterson, C. (2016). Perceptions and Understandings of Archives in the Digital Age. *The American Archivist*, 79(2), 339–370. Retrieved at: https://doi.org/10.17723/0360-9081-79.2.339 (accessed 15.12.2023).
- Preservation Self-Assessment Program. (s. d.). *Preservation Self-Assessment Program*. Retrieved at: https://psap.library.illinois.edu/collection-id-guide (accessed 15.12.2023).
- Purdue University. (2021). *Personal Digital Archiving*. Retrieved at: https://guides.lib.purdue.edu/PDA (accessed 15.12.2023).
- Redwine, G. (2015). *Personal Digital Archiving: DPC Technology Watch Report* 15-01 December 2015, 1st ed. York, Digital Preservation Coalition.
- Sinn, D., Kim, S. & Syn, SY. (2017). Personal digital archiving: Influencing factors and challenges to practices. *Library HiTech*, *35*(2), 222–239. Retrieved at: https://doi.org/10.1108/LHT-09-2016-0103 (accessed 15.12.2023).
- Tracks. (s. d.). *Tracks*. Retrieved at: https://www.projecttracks.be/ (accessed 15.12.2023).
- University of Michigan. (2023). *Digital Archiving*. Retrieved at: https://guides.lib.umich.edu/c.php?g=992751 (accessed 15.12.2023).
- Vlaams Architectuur instituut. (s. d.). Archiefbeheer voor ontwerpers en bedrijven. Retrieved at: https://www.vai.be/advies/archiefbeheer-voor-ontwerpers-en-bedrijven (accessed 15.12.2023).
- Wingo, S. (2012). Preserving Personal Digital Files. A University of Michigan Library Instructional Technology Workshop. Retrieved at https://apps. lib.umich.edu/files/services/preservation/PreservingPersonalDigitalFilesGuide.pdf (accessed 15.12.2023).

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