

Digitising Archival Material at ZIMPAPERS Harare: Emerging Challenges and Opportunities in the Covid-19 Era

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Abstract

ZIMPAPERS has begun a massive digitisation of newspaper stories and photographs, according to their subject, that it has been storing in the established archival facility. Newspapers from as far back as 1892 have been bound to create volumes of newspaper-bound books. Digitisation not only makes them more widely available, but it also has preservation benefits by eliminating or reducing physical handling of archives and photographs by users. The photographs are kept together with the original picture for every published picture and its story. The archival facility serves as a memory and knowledge hub for the organisation and its sister companies, providing journalists and other interested parties with a rich research base. The story-based filing system ensures that stories about the same subject are collected from the newspapers and filed. This sparked the idea of commercialising the knowledge housed in this special collection facility. This unique collection, which has the potential to account for historical events, has proven invaluable to journalists, students, researchers, and the general public. Aside from providing access, opening the facility to the public was a significant step toward monetising the collections, and the potential of the collections to generate some revenue/income for the organisation cannot be overstated. The organisation realised that by continuing to digitise its archives, it can benefit from infopreneurship, even though it has brought its own set of challenges, opportunities, and lessons.

Keywords: ZIMPAPERS; archives; digitisation; infopreneurship; journalist; records



Mousaion: South African Journal of Information Studies
<https://upjournals.co.za/index.php/LIS>
Volume 39 | Number 4 | 2021 | #10050 | 11 pages

<https://doi.org/10.25159/2663-659X/10050>
ISSN2663-659X(Online) ISSN0027-2639(Print)
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Introduction

Historians and researchers require access to historical records as evidence of what occurred in the past. The community at large needs certain records to be permanently preserved as archives to enable today's society to connect with the past. Users such as historians and media scholars stand to lose information if such material is not digitised. Liu (2004) reports that libraries usually digitise the archives of newspapers, artefacts, maps, coins, art, music, children's literature, historical records, and images of international and cultural interests. Indeed, digitisation projects of archival collections centre on addressing the preservation of fragile historical records and delicate archival material of esoteric and intrinsic value, as well as advancing access to the archival collection to a multiplicity of interested users, clients and stakeholders (Sigauke and Chabikwa 2012). Ngulube et al. (2017) observe that archival institutions manage archives to be used, though they are faced with challenges that include giving access to their holdings and reaching diverse users. Digitising records ensures that the continuation of information value remains accessible and usable (Luthuli and Buthelezi 2020).

The digitisation exercise at ZIMPAPERS was initiated almost a decade ago, but it was the outbreak of the Covid-19 pandemic that gave the digitisation initiative an impetus and much attention. Writing about how counter-archives are building and using their holdings, Bhebhe and Ngoepe (2021) note that the Mafela Trust collection in Zimbabwe is composed of paper-based materials, digital materials, photographs, and audio and video materials. Kiisa (2015) conducted a study at the National Library of Estonia and concluded that digitisation was used for old paper newspapers, fragile in origin, to minimise the risks on media formats, making it possible to limit access to the original. Records need to be digitised to make sure that they are safeguarded against loss and damage (Luthuli and Buthelezi 2020), but most importantly, it is a way of preservation and a means of improving access (Gorman 2006). This paper gives a contextual background, identifies the value of newspaper archives, citing, where possible, other similar projects in the world in an attempt to emphasise why this material must be digitised and monetised. It will ultimately highlight the major opportunities that newspaper archive digitisation poses to both the organisation and its varied patrons.

Historical Background of ZIMPAPERS and its Sister Companies

ZIMPAPERS was founded in 1891 in the then Rhodesia by South Africa's Argus Printing and Publishing company. The company established *The Mashonaland Herald* and *The Zambesian Times* in Salisbury (now Harare). In 1892, *The Rhodesia Herald* replaced *The Mashonaland Herald*. The company went on to establish *The Umtali Post* in 1893 in Umtali (now Mutare) and in 1894 *The Bulawayo Chronicle* was also launched. In the 1930s, Sunday editions of *The Herald* and *The Chronicle*—*The Sunday Mail* and *The Sunday News* respectively—were established. Sigauke (2017) notes that newspapers published in early colonial Rhodesia are a unique body of historical records to the archival collections of present-day Zimbabwe, since they are serial publications

that share the state of society or raise public awareness of events occurring across the domains of time and place of the everyday way of life. Brightbill (2020) also states that every newspaper is a snapshot into a single day in the past, including articles about major events and local happenings in equal measure.

When Zimbabwe gained independence in 1980, the Rhodesian Printing and Publishing Company was renamed Zimbabwe Newspapers (1980) Limited and in 1981, the Zimbabwean government, concerned about the foreign ownership of the country's newspapers, purchased a controlling 43% shareholding in the company from the Argus Group, using a grant from the Nigerian government. The following publications were introduced after independence: *Kwayedza* 1986 (Harare); *Zimtravel* 2003 (Harare); *Umthunywa* 2004 (Bulawayo); *The Southern Times* 2004 (Windhoek); *H-Metro* 2009 (Harare); *B-Metro* 2010 (Bulawayo); *Bridal Magazine* 2011 (Harare); *Suburban* 2016 (Harare); and *Business Weekly* 2017 (Harare).

In 2011, ZIMPAPERS expanded its portfolio beyond newspaper publications with the launch of the Harare-based Star FM, Zimbabwe's first commercial radio station. It later launched several other regional radio stations, including Diamond FM in Mutare, Nyaminyami FM in Kariba, and Capitalk 100.4 FM in Harare. In 2014, the company entered television with the launch of ZIMPAPERS Television Network (ZTN). This brief history shows the development of a newspaper company, whose content formed a rich archival source of old newspaper collections, which gave birth to the newspaper archive we have today. Otu and Asante (2015) believe that archives play a pivotal role in documenting the historical memory of humans, while Dube et al. (2017) believe that the major functions of archives are to keep and preserve the historical records for future use and access to these records.

Uses and Users of ZIMPAPERS Newspaper Archival Material

In an attempt to give old newspapers a new lease of life as well as adding value to the collection, ZIMPAPERS has embarked on a newspaper digitisation drive. The informational value of the newspapers makes them have a wide range of users (Thabakgolo and Jorosi 2014). A newspaper archive consists of old newspapers preserved and kept for different use by journalists and other interested individuals and organisations. While they serve as society's collective memory, providing evidence of the past, archives are made available for a variety of research uses, including teaching purposes, building plans, publications, television and radio programmes, plays and legal proceedings (National Archives of Canada 2003).

Newspaper articles can be a useful source of primary information for researchers on both current and historical events. A newspaper archive is a cultural resource—one that has long been available to journalists, scholars and other researchers (Ringel 2021). Newspaper articles are rich primary sources that give users a sense of events as they occurred. Laureta (2009) states: "Newspapers bring to our students real-life situations and can be easily used as authentic materials." The author further states that newspaper-

based activities engage students in interesting and enjoyable activities and encourage them to do further reading. They usually reflect the culture of a certain community through the language they contain. Newspapers also reflect changes in the language and, in doing so, help students and teachers to keep up with such changes. Most newspapers are linguistically up-to-date and provide valuable linguistic data. Providing a snapshot of a period, chronicling how people lived and describing the various social and economic transactions of certain periods, offer a rare opportunity for scholars and researchers to relive the past. ZIMPAPERS' newspaper archive is thus a rich resource for this kind of information. The value of the preservation of the facility and any activity around it, which enhance research while keeping the documents for posterity, can never be overemphasised. "Because newspapers also contain commentaries or retrospective articles about events, they can also serve as a secondary source."¹ Whether used as a primary or a secondary source, newspapers can provide a valuable research tool. Without doubt, microfilmed copies of newspapers maintained at local, state and national repositories remain valuable resources for researchers everywhere (Janice 2016). ZIMPAPERS has experimented on the various uses of the newspaper archive and it is out of such experiments that the need to digitise the content was realised.

The initial idea was to make a reference library for the company's journalists to use when writing stories and developing an already published story. The old stories provide background information to journalists; thus, the preservation of old stories or old copies of newspapers became necessary. The company compiled monthly newspapers and bound them into a hardcover volume. The hardcover provided the cushion against damage, harmful conditions, and mishandling of the newspapers. While archives are valuable, they are not without limitations (Otu and Asante 2015), such as the physical conditions of the files, classification, accessibility and terminology (Ntewusu 2014).

ZIMPAPERS has these bound volumes for every publication from 1891 to date, thus forming a rich newspaper archival resource base of events throughout the entire country. Neudecker and Antonacopoulo (2016) believe that newspapers are among the most valuable sources for scholars who are interested in researching public opinion and how it has been shaped over time. Digitisation saves space, time, enables quick and efficient retrieval of records, promotes good security of records and allows traceability for future purposes or posterity (Luthuli and Buthelezi 2020).

The department responsible for the storing of past newspapers has developed another system of storing news articles, namely by their subjects in their files. The system entailed manually cutting stories from newspapers, pasting them onto plain newsprint, and filing them. According to Thabakgolo and Jorosi (2014), newspaper clipping (cutting a portion of a newspaper subject or heading chosen by the librarian or archivist while discarding the rest of the paper) has been used as a method of newspaper preservation. At ZIMPAPERS, this system resulted in the creation of subject files and

1 https://guides.osu.edu/newspapers/why_use.

sub-categories in which stories of similar subjects were filed and labelled with a date stamp indicating the publication and date of publication. Agriculture-related stories, for example, were assigned a class, and various agricultural practices and crops were assigned subcategories stemming from the main class. For example, 4a1 is a class for agriculture in general, and other agricultural activities are classified as 4a1a, 4a1b, and 4a1c, until the entire agricultural sector is covered. The system covered all areas published in newspapers, including personality files for all prominent persons in the country, region, continent and the world, as long as the newspaper had covered them. The same concept was developed for the sports and business fields, and it provided a rich resource not only to journalists, but also to other external users.

Rarity has an economic advantage in and of itself, driving the organisation to information entrepreneurship. Researchers value this historical collection, and ZIMPAPERS began making the archives available to the public in 2010, but clients began paying in 2013. According to Mnjama (2010; 2018), the primary goal of archival services is to facilitate access to collections in their care so that they can be used for education and research. University students studying political science consult the personality files, which contain news articles on every politician who has been covered since 1891. Academics and researchers rely on newspapers to keep abreast of past and current developments in their subject areas in order to draw sound scientific conclusions (Ifijeh, Iwu-James, and Osinulu 2015).

According to anecdotal evidence gathered by the authors, historians regard the archive as a reliable source for all historic events that occurred between 1891 and the present. It thus supports Ringel's (2021) observation that archives are an important expression of memory, essential to any study of journalism history and historical research more broadly. Larson and Janakiraman (2019) agree that historians prefer primary sources—the actual works or document of the people or organisations in question—and to a lesser extent, other scholars' interpretations of those persons or organisations.

Soderlund (2006) notes in his review of Boczkowski's work that digitising the news draws on a number of scholarly fields and subfields, including sociology, communications, and technology studies using archival data. The authors observed economists visiting ZIMPAPERS to use the archives to check the economic trends in the world as covered by the newspaper in the current study. It thus supports Thabakgolo and Jorosi's (2014) observation that newspapers publish investigations into business, commerce, and finance, as well as advertisements for a wide range of goods and services. Similarly, Ifijeh et al. (2015) state that newspapers contain important information that can be used for academic, research, and economic purposes.

Extant literature indicates that archives such as maps, atlases, gazettes, theses and dissertations, newspapers, statistical records, video films, political record books, journals, and conference papers are used for research, information, litigation, and administrative purposes by scholars—particularly students at tertiary institutions

(Abioye 2009; Kemoni 2002; Uduigwome 1989). Students studying journalism at universities and colleges can also look through the archives to see how the newspaper has evolved over time. Some students conduct research on sporting activities because the newspaper covers sports extensively. The above confirms the observation of Schwartz and Cook (2002) that academics and other users generally regard archives as institutions and its records and documents as a passive resource to be exploited for various historical and cultural purposes.

Opportunities

After realising the potential of the archives in attracting users, the idea to digitise the collections was born in an attempt to make the archives widely accessible and to generate revenue for the company. As content producers increasingly repackage and resell old content for revenue, it becomes more pressing to investigate the practices involved in digitisation and their cultural ramifications (Ringel 2021). Digitisation of newspaper archives allows ZIMPAPERS to fully exploit the monetary value of the content by providing access to a wider usership. Digitisation brings the facility to the people, since it gives them a chance to interact with content from the comfort of their own spaces. This accessibility widening has given ZIMPAPERS the impetus to make money by providing paid access to the materials. Monetisation has become one of the low hanging fruits to be exploited resulting from the digitisation drive. Gilman (2016) states: “There are even companies that sell birth-date newspapers for up to \$50 each. For example, a visitor to AnyDate.com can enter a friend’s date of birth and have an original newspaper from that date sent to him as a gift for \$49.99 plus \$9.50 shipping.” ZIMPAPERS has since realised that the various patrons of the newspaper archive have varied interests in the collection, thus making it viable to sell the information. Digitisation enhances the monetisation drive in that it affords the materials the ability to reach a wider clientele base through internet portals (Ringel 2021; Turkina 2018). In June 2021, ZIMPAPERS sold liberation newspaper articles and photographs from 1891 to 1950 for \$US37 000 to the newly formed Museum of African Liberation. The museum has indicated that it would acquire more content relevant to their establishment—a move which is likely to see ZIMPAPERS generating +/- US\$130 000. The project has allowed the archives to justify their existence, and their potential to generate adequate income may even self-fund the digitisation drive.

Media organisations such as Getty Images have also inspired the incorporation of monetisation in the digitisation drive of ZIMPAPERS’ newspaper archive. Getty Images specialises in selling both historic and current photographs of people, places, events and even objects. They have an online gallery where users can search using key words and the site gives all matching items found. On every photograph will be a price tag and a watermark. Media houses, researchers and journalists use the site for historical content to use in their publications. This approach to media content also means that the materials generate revenue for the organisation, which in turn continues to support the preservation drive, which is a result of digitisation. Getty Images operates a large

commercial website that clients use to search and browse for images, purchase usage rights, and download images. Image prices vary according to resolution and type of rights. The company also offers custom photo services for corporate clients.²

ZIMPAPERS' newspaper archive has a rich collection of photographs, which when digitised, can generate revenue for the organisation. The monetisation drive of the newspaper archive during the period of the Covid-19 pandemic comes at a time when organisations are advocating for online business operations as opposed to physical operations, which may expose people to virus infection. ZIMPAPERS' archive seeks to be accessible and generate money, even when businesses are struggling. This is achievable, since (during the pandemic) most of its users are having online lectures and lessons, however, they still need to refer to the facility for research material.

Due to the accumulation of newspapers since 1891, the preservation of a hard copy newspaper in a physical space has become a difficult task. Amollo (2011) views digitisation as a process of converting print-on-paper resources to digital form, usually by scanning. Digitisation preservation plays a critical role in preserving endangered archives. The archives are at risk of disasters such as fire, which will threaten their survival. In fact, fire can lead to the total loss of a precious and unique collection. For ZIMPAPERS, preservation was a key requirement, as part of the collections had started to deteriorate and become unusable even for reference, as the pages were brittle and delicate. In order to arrest further deterioration of the hard copies, digitisation posed an opportunity to give the collection a new lease of life. Digitisation provides a seamless transition over the life of a collection and transfers all the activities onto a virtual environment, which protects the physical state of a collection (Amollo 2011; Luthuli and Buthelezi 2020; Sigauke and Chabikwa 2012). Digitisation of a collection ensures that the physical handling of hard copies is minimised. It also ensures that activities such as frequent photocopying or scanning of hard copies is minimised, thereby minimising the tearing of hard copies (Amollo 2011; Dewah and Feni-Fete 2014).

Challenges

The cost of digitisation includes many hidden and ongoing costs, such as the purchase of software and hardware, which accounts for only a small portion of the overall budget for a digitisation project due to administrative and maintenance costs (Zhang and Gourley 2009). Newspaper archive digitisation for ZIMPAPERS necessitated the use of scanning equipment capable of handling large format papers. This equipment is not readily available locally, and it is also somewhat expensive. It is only available in Germany and the United States of America and ranges in price from \$45 000 to \$69 000, depending on the specifications. The ZIMPAPERS Archive was unable to generate significant revenue from its current operations, and it was difficult to persuade the organisation's management that the venture was worth financing.

2 https://the-true-baby-einstein.fandom.com/wiki/Getty_Images.

Small scanners were chosen to cover small to medium-sized archival materials, such as A3 and A4 and anything smaller. The challenge with this option is that the scanning output quality is unsatisfactory. Since these smaller scanners lack Optical Character Recognition (OCR), future searching becomes difficult once the materials are uploaded onto a system. Users can conduct keyword searches on OCR text from newspaper articles (Anuar, Law, and Yee n.d.), which makes it user-friendly and advantageous.

According to Sigauke (2017), digitisation is a process that requires both hardware and software technologies, so it is critical to purchase the necessary computer scanning equipment and data storage hardware with capacities capable of producing quality assured output from the digitisation process. The ZIMPAPERS organisation chose low-cost equipment that is not suitable for high-volume work, so scanning speed is relatively slow, making the process time-consuming. The picture output quality is also insufficient for materials that will be offered for sale on the market.

As a pioneering project in the country, the organisation also faced difficulties in finding experienced personnel to handle the scanning and storage process. Organisations view the lack of digital skills as a major impediment to the success of digitisation projects (Laumer 2019). Newspaper digitisation has not yet been fully explored in Zimbabwe; each step of the process is both an adventure and a step into uncharted territory. The lack of expertise has slowed the process, while also exposing the materials to mishandling and even destruction.

One significant challenge in this area is the lack of a dedicated website. The organisation continues to use a server-based system that can only be accessed on ZIMPAPERS' premises. The challenge has been to upload the digitised material onto a web-based platform. Other international newspaper archive websites, such as Newspapers.com, are designed so that users can browse the collections. Users can also save, print and share the materials via the website. When you find something on Newspapers.com that you want to keep, you can either print the image directly from the viewer or download it and save a digital copy. ZIMPAPERS has yet to invest in such a system, which has hampered user access to information because physical visits have been discouraged due to the Covid-19 pandemic. Had ZIMPAPERS invested in this type of infrastructure, this would have been the ideal time to generate revenue, as during the pandemic business has been limited to online transactions.

Conclusion

The digitisation of newspaper articles, stories and photographs at ZIMPAPERS resulted in the establishment of an archival facility. The digitisation exercise has improved wider access to materials, while also bringing preservation benefits by preventing users from physically handling archives and photographs. The special collections facility serves as the organisation's memory hub, providing archival users such as journalists, students, researchers and the general public with a rich research base. Due to the strict Covid-19 pandemic restrictions on face-to-face and human interaction, this rare collection has

been commercialised, inadvertently propelling the organisation into information entrepreneurship (infopreneurship). The ongoing digitisation of archives has brought with it new challenges, opportunities and lessons.

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