

In today's digital age, you're probably asking why we are still using microfilm. However, despite the speed and ease digital access has provided us in recent decades, the endless software and hardware changes and upgrades render digital systems unreliable and too expensive for long-term preservation and access of records and photos.

While digital technology allows information to flow around the globe in seconds or minutes, it has actually taken us backwards for preservation. For example, an electronic version of the *Domesday Book* compiled in England in 1086 has become unreadable after only 16 years due to changing technology while the original 900-year-old analog version remains readable.

Since the 1950's, the Wyoming State Archives has been microfilming records and receiving records on microfilm. The microfilm database index is available through the Internet at <http://micrographics.state.wy.us/>.

The microfilm collection includes records from state and local government agencies, private collections, and a few federal documents. Almost all of the Wyoming newspapers, dating from 1849, are on microfilm and available for research. For information about purchasing microfilm copies, call (307) 777-7826, or visit our web site at <http://wyoarchives.org>.

This brochure was created with input from people who attended the 20th Annual Midwest States Micrographics Conference in September 2007, which was hosted by the Wyoming State Archives, Department of State Parks and Cultural Resources.

The Wyoming State Historical Records Advisory Board helped sponsor the creation and publication of this pamphlet with a grant from the National Historical Publications and Records Commission, National Archives and Records Administration.

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Why Microfilm?

Technology is not the solution to preservation; it is the problem.

"Information lasts only so long as someone cares about it. The conclusion I've come to ..., after several decades of careful consideration, is that there is no set of hardware and software standards existing today, nor any likely to come along, that will provide any reasonable level of confidence that the stored information will still be accessible (without unreasonable levels of effort) decades from now."

Ray Kurzweil, well-known inventor

Importance of Preservation

Historical documents and information are the foundation of our democracy and our heritage. Think about what we would lose without the Declaration of Independence or the Constitution of the United States. Preservation of resources like these is the basis for access to public information and records of our history.

Many documents that are produced today, such as personal letters, pictures, contracts, newspapers, and medical records, will be considered valuable historical documents in the future. However, these documents will be lost if they are recorded on digital formats that will become obsolete in a relatively short time span.

The Document Life cycle

It helps to understand the problem by separating information management into active and inactive stages.

The active stage varies by application, but it's usually documents that are needed for one year or less.

The inactive stage can be any length of time including permanent. (Nothing is permanent, but microfilm and paper, with 500-year life expectancies, are readily available.)

There is a general consensus among archivists that digital works best for active information, and paper and film are best for inactive information.

Challenges of digital preservation

Proprietary technology – the lack of standards between the multitude of hardware and software manufacturers makes it difficult to ensure access, particularly over time.

Laborious conversion – both paper and microfilm can be scanned and converted to searchable text using optical character recognition technology, but because the scanning is inaccurate, it requires laborious editing.

Non-backwards compatibility – technology manufacturers tend to focus on new features rather than preserving those that were previously used.

Continuous maintenance – digital preservation is not a one-time conversion due to technological changes; materials require migration to maintain access.

Continuous cost – annual maintenance agreements and additional expenses to migrate the information are difficult to budget for due to the unpredictable frequency and cost of new technology.

Short lifetime of storage media – in the last twenty years, technology has used many forms of media, including 8", 5.25" and 3.5" floppy disks, tape cassettes, zip disks, CDs, and DVDs.

Advantages of Microfilm

Analog system – meaning it is an actual image of the original data making it is easy to view, and is legally acceptable.

Long lifespan – microfilm has, at least, a 500-year life expectancy.

Absence of migration – once created, microfilm does not require costly maintenance to ensure preservation and accessibility.

Established standards – microfilm and its readers have been created with standards among manufacturers, which allow continual access.

Disaster resistant – in situations like floods and hurricanes, microfilm can be salvaged, unlike paper or digital records

Space saving - microfilm saves 95% of the space required to store paper documents.

Preservation for the Future

Today's preservation techniques, including archival paper and microfilm, help provide the solution to saving our valuable information. Maybe a future resource of preservation will provide the benefits of both worlds – the life expectancy of microfilm and the wide-scale access of digital technology.