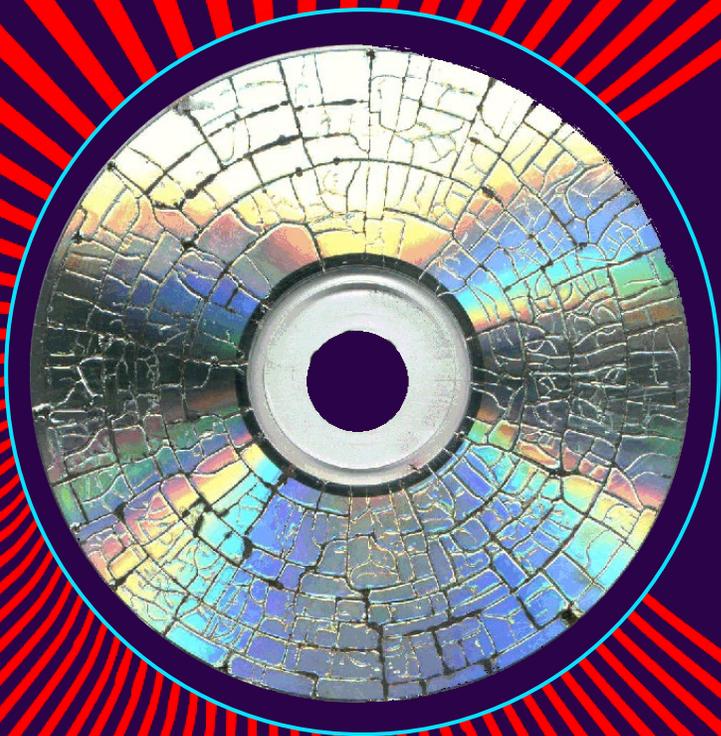
The background features a dark blue gradient with abstract, wavy lines in red and light blue. A grid pattern of thin lines is visible, particularly in the lower right quadrant, creating a sense of depth and movement.

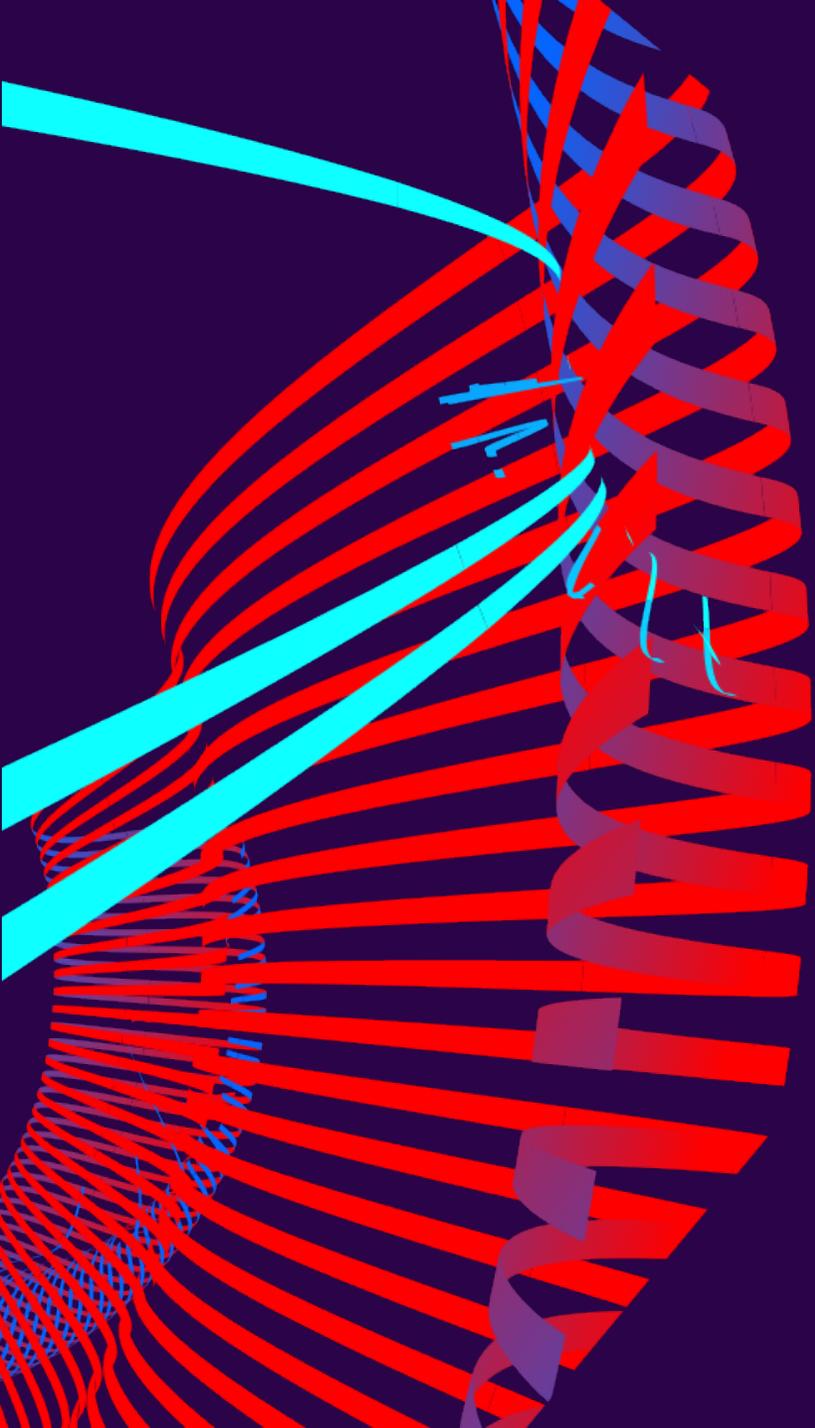
# HOW LONG WILL DIGITAL MEDIA LAST?

PRESENTED BY THE UNIVERSITY ARCHIVES



## INTRODUCTION

Digital storage media is an easy way to preserve our memories, but digital content can be lost if proper care is not taken.



# WHAT FACTORS IMPACT THE LIFE OF MEDIA?

## MEDIA DURABILITY

Digital media comes from many manufacturers. Finding media that is well made can impact the life of the media.



An example of "disc rot" in which the aluminum layers of a disc begin to oxidize.

## MEDIA DURABILITY

For example: If the dye used in a CD-R is azo based, it will last 5-10 years. If it has a phthalocyanine dye it may last up to 100 years.



An example of “disc rot” in which the aluminum layers of a disc begin to oxidize.

# INTERACTION USE

Each type of media has strengths  
and weaknesses.



An assortment of media formats.

# INTERACTION USE



An assortment of media formats.

For example: A DVD-R can store data but isn't ideal for regular access due to slow data transfer.

# INTERACTION USE

In contrast, an HDD works well for regular access, but lack of use can cause mechanical failure.



An assortment of media formats.

## INTERACTION STORAGE

When storing media, the temperature should be kept between 60 and 68°F with humidity between 35 and 45%.



Improperly labeled thumbdrives can be easily misplaced or reformatted.

# INTERACTION STORAGE

Label all media in order to locate it when needed and to ensure it isn't accidentally discarded.



Improperly labeled thumbdrives can be easily misplaced or reformatted.

# INTERACTION HANDLING

The more media is handled the more likely  
it is to fail.



An example of a damaged hard drive

## INTERACTION HANDLING

Optical media (CDs & DVDs) can be easily scratched even during careful use.

An HDD that is bumped or dropped while being accessed may become unreadable.



An example of a damaged hard drive

# MEDIA OBSOLESCENCE

What is common today may become a rarity tomorrow.



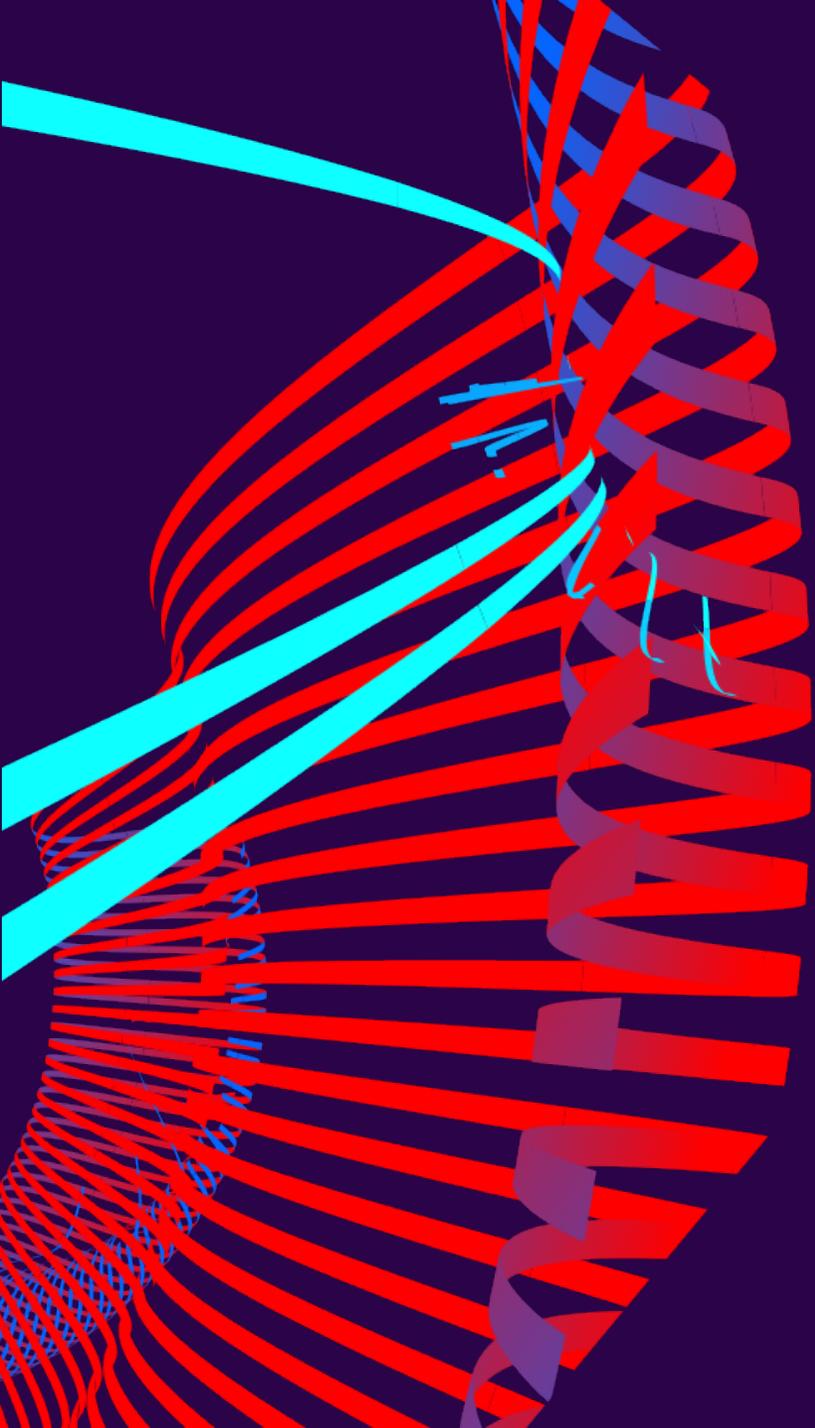
Apple began removing optical drives from their computers in 2008.

# MEDIA OBSOLESCENCE

For example: CD-Rs were used to store data in the early 2000s, but as tablets have become a go-to device there is not a way to easily retrieve data from the discs.



Apple began removing optical drives from their computers in 2008.



**HOW CAN YOU  
PROTECT YOUR  
MEDIA?**

# HOW CAN YOU PROTECT YOUR MEDIA?

## **Maintain at Least Two Copies of Content:**

Keeping multiple copies of media will help protect data loss if one copy gets damaged or corrupted.

# HOW CAN YOU PROTECT YOUR MEDIA?

## **Store Extra Copies at Different Locations:**

Keeping copies at different locations will protect media in case of catastrophic damage at a location such as fire or flood.

# HOW CAN YOU PROTECT YOUR MEDIA?

## Use Different Types of Media:

Keeping content on multiple media types will assist in ensuring that no singular media type becomes unreadable or obsolete.

# HOW CAN YOU PROTECT YOUR MEDIA?

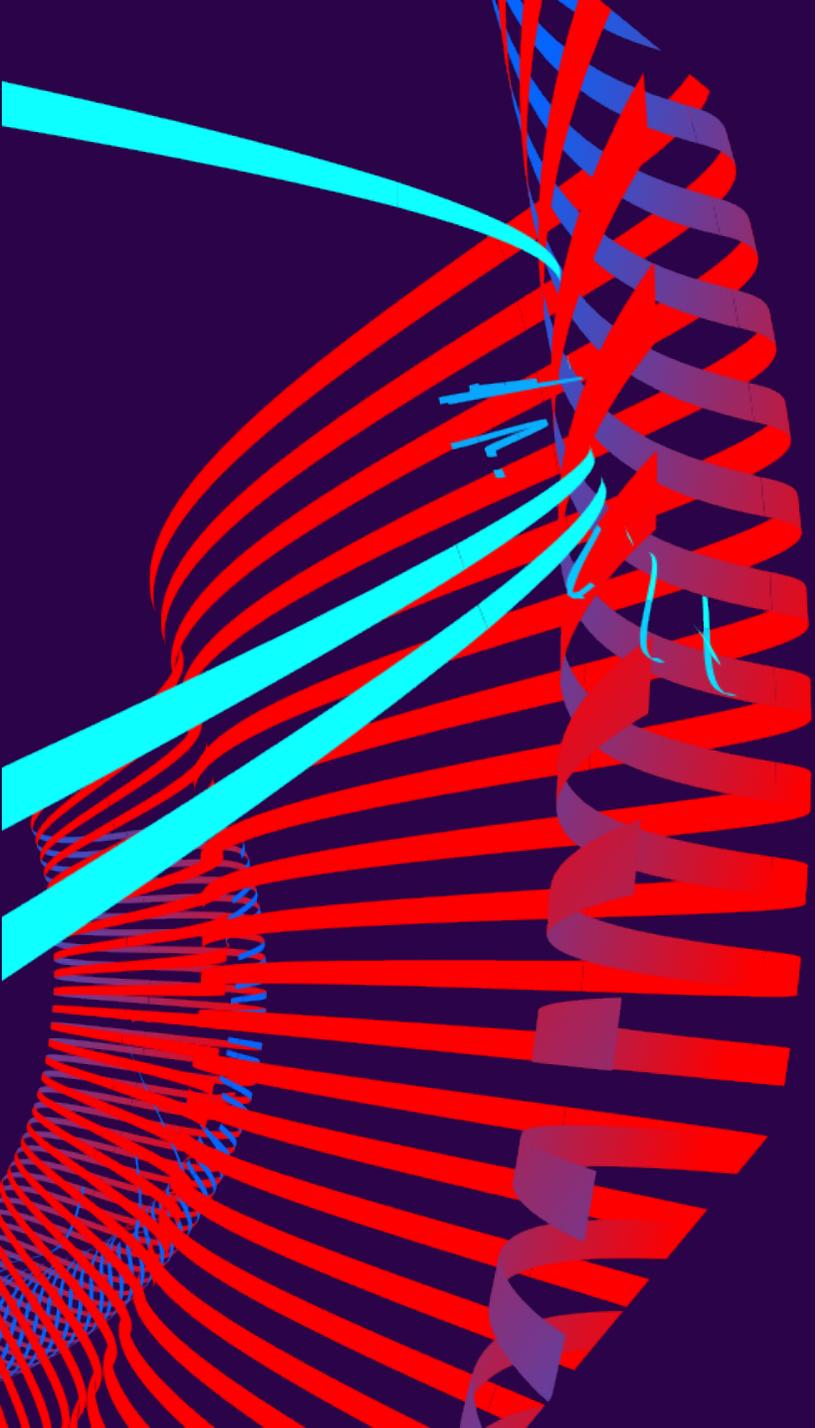
## Label Media Properly:

Poorly or unlabeled media can easily be thrown away or ignored.

# HOW CAN YOU PROTECT YOUR MEDIA?

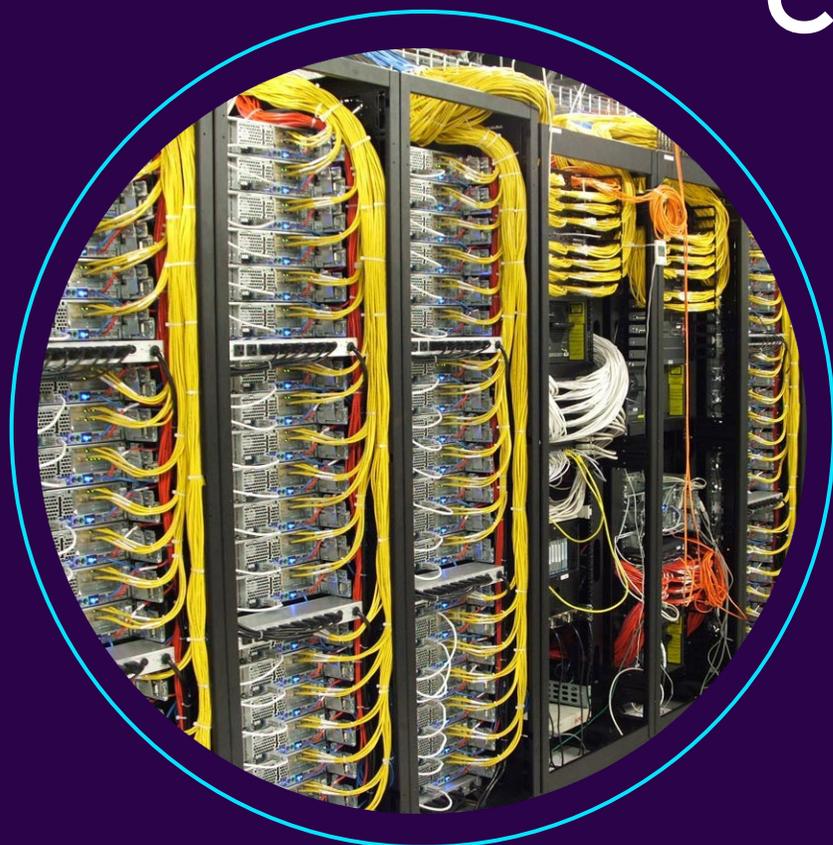
## Create New Copies Every Five Years:

Media has different lifespans; using a five-year-rule will ensure that media will retain uncorrupted content on fresh media.



# CLOUD STORAGE

# CLOUD STORAGE



The backside of a server array.

Cloud storage has become a popular option for personal data storage, but it isn't the perfect solution.

# CLOUD STORAGE

## PROS & CONS OF CLOUD STORAGE

### Pros

- Convenience
- Global accessibility
- Easy Sharing
- Reliable Data Backup

### Cons

- Data Privacy Concerns
- Security Breaches
- Subscription Cost
- No Internet = No Access

## IN CONCLUSION

The best plan is to ensure that multiple copies exist in different locations and are refreshed every five years.

Using cloud storage as a supplement will help make for a robust personal archive.



# REFERENCES

## Library of Congress

How Long Will Digital Media Storage Last?

[https://www.digitalpreservation.gov/personalarchiving/documents/media\\_durability.pdf](https://www.digitalpreservation.gov/personalarchiving/documents/media_durability.pdf)

## Government of Canada

CD formats and their longevity – FAQ

<https://www.canada.ca/en/conservation-institute/services/care-objects/electronic-media/cd-formats-longevity-faq.html>

## South Carolina State Library, Digital Collections

Electronic Records Management Guidelines

[https://dc.statelibrary.sc.gov/bitstream/handle/10827/7111/DAH\\_ERMG\\_Digital\\_Media\\_Storage\\_2008-3.pdf](https://dc.statelibrary.sc.gov/bitstream/handle/10827/7111/DAH_ERMG_Digital_Media_Storage_2008-3.pdf)

## Computer History Museum

The Storage Engine: A Timeline of Milestones in Storage Technology

<https://www.computerhistory.org/storageengine/>