

## PERSONAL DIGITAL ARCHIVING SERIES

# How Long Will Digital Storage Media Last?

All digital storage media have a short life. This is why digital preservation requires active management, including regular migration of content from older storage devices to newer devices.

The life of storage media are cut short by at least three factors:

1. **Media durability**
2. **Media usage, storage and handling**
3. **Media obsolescence**



## 1. Media durability

Computer storage media devices vary in how long they last. The quality and construction of individual media items differ widely. The following estimates for media life are approximate; a specific item can easily last longer--or fail much sooner.

## 2. Media usage, storage and handling

People have a direct impact on the longevity of storage media:



- The more often media are handled and used, the greater the chance they will fail; careful handling can extend media life, rough handling has the opposite effect.
  - Stable and moderate temperature and humidity, along with protection from harmful elements (such as sun and salt) helps keep media alive.
  - Good-quality readers and other hardware media connections are beneficial; poor connections can kill media quickly.
- Media that are not labeled or safely stored can be lost or accidentally thrown away.
  - Fires, floods and other disasters are very bad for media!

### 3. Media obsolescence

Computer technology changes very quickly. Commonly used storage media can become obsolete within a few years. Current and future computers may not:

- Have drives that can read older media.
- Have hardware connections that can attach to older media (or media drives).
- Have device drivers that can recognize older media hardware.
- Have software that can read older files on media.



### What you need to do

Actively manage your important digital content! Steps to consider:



- Have at least two separate copies of your content on separate media—more copies are better.
- Use different kinds of media (DVDs, CDs, portable hard drives, thumb drives or Internet storage); use reputable vendors and products.
- Store media copies in different locations that are as physically far apart as practical.
- Label media properly and keep in secure locations (such as with important papers).
- Create new archival media copies at least every five years to avoid data loss.

