Managing Video Clutter - Organizing and Preserving Your Home Movies for the Long Term

Recording home movies and sharing videos with friends are fun activities. Videos are the best way to record life's memorable moments. New recording and editing technologies make it increasingly easier to take movies, edit them, and share them with others across the Web. The resultant videos are then saved to a variety of flash drives, memory cards, external hard-drives, DVDs and online hosted services.

This collection, together with the pre-existing collection of video tapes and 8mm/16mm film, represents a significant amount of video content. If not maintained to current technology standards and if not organized, this collection of video content can instead become video clutter.

Managing a growing video collection requires commitment and resources. If not done on a regular basis, the task can becomes harder as technology continues to advance and change, making older access and storage technologies obsolete.

This e-book guide is for the person or family interested in both managing and preserving their video library. Video collections can contain the most important information, memories, and recollections of the past, and are considered cherished assets, sometimes more valuable than monetary investments. This guide provides tips on how to organize your home movies so that you know what you have, know where to find it, and know that it will be there when you need it.

Table of Contents

The Challenges of Video Clutter

In this section: What is video clutter, why it is hard to address, and what mindset is needed to overcome its challenges.

Defining the Problem

What is Video Clutter? Video clutter is an unorganized, growing collection of home movies originally recorded with cameras, camcorders, computer tablets, and cell phones; and then stored on a varied collection video tapes, 8mm and 16mm film reels, memory cards, flash drives, DVDs, and computer hard-drives.

Why is it a Problem?

- **Loss of Content:** Unorganized, unattended video clutter without proper back-up represents a potential for loss of recordings of life's memorable moments. Technology changes with the passage of time, resulting in a loss of a previous generation's access technology (such as players, projectors, and computer programs), the deterioration of video tapes and film, damage to DVDs, and corruption of hard-drives and flash drives.

- **Loss of Relevance:** If descriptive, identifying information is not included when the video is first recorded, or later added; the video's relevance diminishes each passing year. Future audiences cannot appreciate what they are watching if proper context and identifying information are not provided.

- **Misplaced Videos:** In larger collections, if not organized properly, finding a particular video that you want to view again or share is very, very difficult.

- **Money:** Your home videos are a valuable investment. Take care of them regularly and spend less money, compared to waiting until it is almost too late and spending lots of money to save precious memories. If you have ever watched *America's Funniest Home Videos* you know that video clips from a collection can be quite entertaining, insightful, and in some cases valuable. It is very common for businesses to repurpose (re-use) past video clips for advertisements and other marketing projects. Families may choose to re-use video clips from their maintained collection for presentations at special events such as weddings, graduations, and anniversaries.

Roadblocks

Roadblocks to addressing the problem are apathy, lack of commitment, procrastination, lack of resources (time and money), lack of expertise, and fear of change.

Apathy: Lack of Commitment, who cares and why bother? It's about priorities. Apathy is overcome once preserving the video past becomes a top ten priority. Until then, saving the video recordings, representative of life's important moments stored on video tapes, film, DVD, flash drives, and external hard-drives, etc., is something to think about for the future.

Procrastination: Recording the videos is easy and fun. Managing, organizing and preserving the resulting video collections can be challenging. It requires commitment,

time, resources, and money to manage a family's video library. Oftentimes, it is easier to wait another year, rather than tackle this challenge now. Procrastination is overcome once saving the past videos becomes a priority.

Lack of Resources – Time, money, and expertise: The USA's Library of Congress may spend millions of dollars to preserve our nation's past, but it requires only modest amounts of time, money, and expertise to take care of the family's video library. A combination of research, organization, outside help, and one's own investment of time can come up with a good solution to preserve life's best moments and leave a lasting legacy.

Accommodating Change: Technology continues to change, and it is a regular challenge to keep up with latest trends in technologies for recording, sharing, and storing videos. People fear possible permanent loss of irreplaceable video recordings during media conversion or transfer to new storage media. Eventually, as the older access technologies become obsolete, it becomes necessary to move older video recordings to storage on new technology platforms. Standardization on best practices in digital file formats, naming conventions, and adding embedded information for your video recordings will make it easier to accommodate changes in technology and keep your videos intact.

Best Mindsets to Overcome the Challenges

Sense of Urgency: A sense of urgency provides the best means to overcome roadblocks to managing video clutter. Do it now before too late! Irreversible loss of irreplaceable memories can happen if something is not done sooner than later.

Legacy: Family video recordings are oftentimes very valuable to those that collect them; almost the same as monetary investments. Video recordings are the best means for showing past events and telling others what happened. A desire to leave behind a legacy for future generations is also a reason to manage the family's video collection. Common sayings are "we learn from our past" and "we need to know, understand, and learn from our past in order to better prepare for our future".

Money: Address the problem now, and save money down the road. It does not get easier and cheaper in the future to manage the video library; on the contrary, it becomes more difficult and more expensive because technologies change and memories fade with passage of time. As with managing clutter in the home, it is easier to tackle little clean-ups on a regular basis versus waiting 5 years for one massive reorganization and removal of all clutter at once.

Best Practices for Managing Video Libaries

In this section: Best practices reviewed in a number of areas, including assessment, standardization, digitization formats, organization, labeling, and storage media.

Mission Statement and Work Plan: Plan your work, work your plan. Any project worth doing requires a clear, concise idea of why and how the work is being done, what the end goals are, and who will be doing it. Decide in the beginning, and make regular adjustments, as to how much time and resources are going to be committed to the management of a video collection. Whether the investment is small or large, having a mission statement and work plan in place will help in achieving expected results. Decisions will need to be made on what is worth keeping, what the main video organizational categories should be, where to store video files, and what to standardize upon for managing the collection.

Assessing & Pruning: According to the Society of American Archivists (SAA), approximately to 2% to 5% of recorded information is determined to have enduring value; meaning information that has lasting significance to the organization that originally recorded it. For families, let's assume 10% to 15% of video recordings are actually worth keeping for the long term. If this assumption is acceptable, best practices are to regularly edit out of the collection those videos that are not worth saving for the long term. The decision criteria for pruning can be based upon pre-determined organizational groupings, as well as, the subjective, qualitative impact of the video recording itself. This pruning can be done weekly, monthly, semi-annually, or annually; the frequency dependent upon the size of your video collection. Doing the culling regularly lessens the need for more time investment and expense in the future. It is much easier to manage a smaller, organized video collection than a large video collection of unknown content, If not done at all, the video clutter builds up rather quickly, and more time investment is eventually required when it comes time to determine what to save for posterity.

Frequency of Review: Managing a video collection is a small hobby. It is best to stay updated on latest trends concerning video recording, editing, sharing, and storage. There are numerous places to go for this information and advice, including popular websites, independent retailers, and leading magazines. Some examples are Consumer Reports, Popular Science, PC Magazine, Wikipedia, TopTen Reviews and Digital Video Editing. Spend a couple hours each year getting updated on technological trends for managing the video recordings. This is always a work in progress. It may not be possible for a video collection to last forever, but those collections that do last a long time, do so because of dedication to the task and regular attention to technology's trends.

DIY or DIFM: <u>D</u>o-<u>I</u>t-<u>Y</u>ourself or Outsource (<u>D</u>o-<u>I</u>t-<u>F</u>or-<u>M</u>e) the regular maintenance and management of your video collection? Businesses may contract with specialized vendors for management of their company's video library; but it is recommended that families perform most tasks themselves, and contract with vendors only those things that are outside their comfort zone. Examples of items that can be done without outside help are the following: naming files, editing video content, conversion of data files to standard formats, saving videos to flash drive and external hard-drive, etc. Consider outside vendors for digitizing 8mm or 16mm film, conversion of video tapes and camcorder hard-drives to data file formats, and for online hosted video file storage.

Stay current on technology trends with the help of outside vendors, visiting their stores or websites for help in this area. Archiving experts say that no one particular storage solution is permanent. Instead, it is best to regularly maintain video data files, stay updated on technology trends, and make adjustments to video data files so as to accommodate new standards for video

play and information management. Use outside sources (magazines, websites, and friendly vendors) to stay current on technology.

Standardization: Standardization is recommended in managing video collections because it makes the task easier. It is best to standardize on technologies and methodologies for video recording, digitization formats, naming conventions, storage media, backup storage, and long term preservation management. It can be simple or as complex as one prefers, and will include decisions about open (non-proprietary) versus proprietary design, and about which technologies and suppliers will be around for the longest time.

As example, non-proprietary open standards, such as .mp4 video data file formats, are accepted by all video editing software packages. An argument can also be made for selection of a proprietary video data file format from industry leaders such as Apple (.mov), Panasonic (.mxf), Canon (.mvi), Sony (.mts), Windows (.wmv), and others, since these large companies and their video editing applications will be around for a long, long time.

When possible, make choices for the long term, choosing a solution that will be around for at least 5 years or greater; doing this reduces the number of required future changes to accommodate changing technology. For example, according to government sources (National Archives and the Dept. of Defense), optical disc technologies (CD, DVD, and Blu-ray Disc) will continue to be in use for the next 30 years, and the average life span of a DVD is five to ten years. Selection of Blu-ray Disc as a storage media for the video collection would be a good choice because the technology to read it will be around for the next 30 years (based upon government estimates) and Blu-ray Disc is the most current form of optical disc. Industry leaders such as Sony acknowledge that Blu-ray may be the last and final optical disc format, and further incarnations of Blu-ray will allow the technology to live quite a long life.

Digitization: It is best to digitize the entire video library to a standard file format; pick a compressed data file format for transporting and viewing the video collection; pick a second format (less compressed) for editing purposes; and save the data files to your preferred combination of video discs for your video players, data files for storage on your computer's hard-drive or external flash drive, and a third copy placed in long term storage (safe deposit box, off site storage, or online hosted service). Examples of digital file formats for videos are the following: .avi, .mov, .mp4, .wmv, and MPEG-2. These data video files can be played by most video software programs, and are typically stored on video DVD, Blu-ray Disc, optical data disc, flash drive, or external hard-drive. Video discs (DVD and Blu-ray) work in video players, while data discs work in computers containing specialized video playing software. Video DVDs work in both DVD and Blu-ray players, while video Blu-ray Discs work only in Blu-ray players (not DVD players).

It is highly recommended to digitize any remaining collection of video tapes, old 8mm and 16mm films, and other earlier recording formats because the access and player technologies for these older media are becoming less available to the consumer. Digitization of film can be outsourced to a service bureau or local retailer offering this service. A best practice is to select a film scanning service offering high definition transfer of film to data file formats with 1080 to 2160 lines of resolution or higher. This type transfer, whether delivered on Blu-ray Disc or as a HD data file, will show and play much better on current HDTVs. The same applies to digitization of video tapes (consumer and broadcast varieties). Service bureaus have capabilities to treat older video tape content so that it plays better on HDTVs.

Organization: Standardization on video grouping categories and file naming conventions helps in management of the video library.   The most common grouping categories are based on year (date), special and seasonal events, persons, significant life milestones (birth, graduation, wedding, anniversaries, reunions, etc.), activities (sports, recitals), vacations, location, stuff (for insurance information), company or employment, pets, personal favorites, traditions, and special learning moments. Others can certainly apply. Common naming conventions for video discs or video files will include person, date, location, and event in the disc label or file name.

One exercise that is helpful in both the organization and ongoing assessment of the video collection is the creation of digital yearbooks. The digital yearbooks take the best videos organized according to the important categories, and limited to one year at a time. This type yearbook can be created using off-the-shelf video editing software packages. The resultant digital yearbook helps highlight what is most important in each year of the video collection. The content that does not make it into the digital yearbook should be considered for pruning.

Memory Notes - Information Attachment: Videos can become less relevant with the passage of time if future viewers do not know or remember or understand the context in place at the time the original video was being recorded.   It is a good practice to pass on the "what, why, where, when, and who" of the original video recording. Suggestions on best ways to maintain the memory notes about each video disc or video file are the following: 1) maintain a separate spreadsheet or text file that provides a detailed description of video contents and their background for each disc or video file: 2) place embedded information within the video files called meta data that contain key words, title, and short description; 3) add onscreen titles to the video content to denote special video clips; and 4) add pop up menus to video discs that contain background information of the content; these menus can be activated by the player's remote control while viewing the video.

Adding key words and descriptive information to the video content, video file, and/or the video disc makes it easier to locate a particular video when it is needed in the future. Search engine software applications are available, such as from Google and Perfect Search, that look for key words and meta data information embedded within video data files. Such software based search tools are invaluable as you search for a particular video that is stored on computer, external hard-drive, flash drive, data disc, or in online storage.

Backup Copies: Keep multiple copies, more about this in the next section.

Long Term Preservation

There is an old IT rule, the rule of three (3-2-1) that you should consider when archiving all of your video content. It states to make 3 copies of anything you care about, in 2 different formats, with 1 offsite backup. This rule applies to preserving the video collection. We recommend saving your video files in three different places, and in different formats for play and storage.

Best disc format choice for video disc players is Blu-ray. Blu-ray Disc is preferred because its greater storage and faster transmission characteristics provide for high definition presentation on HDTV and access to more information. Blu-ray Discs can be set up to contain information menu pop-ups, video pictures within pictures, and access to network content. When used as a video disc, a typical BD-R can hold up to 9 hours of standard definition video (equivalent of 4 to 5 DVDs) and 3.5 hours of high definition video content. One caveat about this choice is that you must have a Blu-ray player in order to play a Blu-ray Disc.

Best disc format for data file disc storage is Blu-ray. Single layer Blu-ray Discs hold 25GB of information (five times the capacity of DVDs) and dual layer Blu-ray Discs can store 50GB of content. These capacities are the highest for current optical discs.

Best video file format for Internet transport and showing videos across the Web is either .mp4 or .wmv format. .mp4 is an open standard, non-proprietary format while .wmv is specific for Windows-compatible video play/edit programs. Both file format types are highly compressed and suitable for high definition movie streaming and downloading situations. Such file formats are considered "access" copies for viewing and easy mobility. It is recommended that a complete copy of your video collection be in either .mp4 or .wmv format and saved in two places, such as on data disc, on flash drive, on external hard-drive, or in online hosted storage. Keep one copy at home and one copy in offsite storage.

Other considerations

Online storage and hosting services: such services are available from a growing number of hosting providers, with some of the biggest names being Amazon Web Services (AWS), Google, and Apple's iCloud. It is important that the provider have a secure, intuitive easy-to-use interface and be viewed as a trusted digital repository for your video collection. When considering an online hosted service, ask about network availability, video content durability, and the service fees. These differ depending upon provider. The network availability should be at least 99.9% in any month. The content durability should be greater than 99.999%, measuring how frequently the video content is backed up and across how many storage locations. Service fees are usually charged for storage, downloading, and Internet access.

Social Media Networking Sites for video storage: many sites such as Facebook and YouTube (Google) offer online storage of videos, timeline organization, and easy ways to share your content with others. These sites are also adding video editing programs so that it is fairly straightforward to create custom videos for special occasions and then post these videos for viewing by others.

Offsite Storage Services are available from many providers. A major vendor for this type service is Iron Mountain, based in the USA, with multiple hardened storage facilities around the country.

The ***Safe Deposit Box*** is another way to save video discs and flash drives for the long term.

Alternative Long Term Formats

M-DISC is a special archival disc, holding approximately 5GB content that can be read or played by DVD and Blu-ray players manufactured after 2009. The M-DISC is rated by the US Dept of Defense to retain information content for up to 1,000 years, well beyond the limits of any other optical disc.

LTO-5 Tape is used by the film industry and corporate IT departments for permanent archive of video content. One LTO-5 tape can store up to 1.5TB of video content or approximately 1,500 hours of .mp4 formatted video.

Benefits

The benefits to managing video clutter are the following:

- Knowing what you have for video content

- Knowing where to find videos contained within your collection

- Knowing the video content will be there when you need it in the future