

Audio and Video Presentations on the Internet

The internet has opened the doorway for people to have a much larger voice in their government. It provides access to tools that should augment, not supplant, existing modes of communication as a means of providing information to as many people as possible.

It was made abundantly clear during the last Presidential campaigns and with the new Administration that the internet can and will be used effectively to keep people informed and to encourage citizen participation.

In the Beginning

(“I know nothing!!!” - Sgt. Schultz of Hogan's Heroes)

NOTHING! That is exactly how much I knew about Audio/Video recording for the internet when I started this process. In fact, this is exactly how much I knew about:

- My local government
- Blogs and blogging
- Webpage design
- Recording Audio/Video Files
- Posting of audio and/or video files to the internet

My process of using these mediums began when I found it difficult to obtain copies of our local Planning Commission Meeting Minutes. While wandering through Best Buy on day, I happened to notice these tiny little hand-held recorders that were about \$35. I decided to take a chance and get one to start recording those meetings for my own use.

The affect of the visible presence of that little device on the Planning Commission was an inspiration to me. I started carrying it to all of the meetings.

It was only a couple of weeks before I discovered that I was running out of storage space on the recorder and I needed to do something with the recordings it held. Although it is against my core belief and values to do so, I finally picked up the manual that came with it and read the directions for use.

Wow! What a wonderful little tool! I could make audio recordings, put them on my computer, and then put them online to share with everyone! Oh! What fun! Of course, I was in no way influenced by the visions that ran through my head of how the Planning Commission and Town Council would react to that happening.

Since I already had a website, MyVAResources.com, where I posted the public documents that I received, it seems that this would make a great home for audio files as well. It took me a couple of hours to work through the process and put my first audio recording of the Christiansburg Town Council online. Being rather excited about my new discovery and skills, I immediately blogged on it and started a cyber riot! People loved it! Fortunately or unfortunately, based upon ones perspective, this set up a situation where people were now depending upon me to record and post those audios.

The changes were immediate in the presentation styles of officials as the meetings became a lot more professional sounding. Additionally, the number of people showing up at the meetings began to slowly rise. It was not until much later that I learned that some people reported they had come to the meetings, spoken up, and either been embarrassed by the response they received, or simply ignored. These folks liked having a way in which they could document their concerns and the responses they received. (Of course, there are always those who like to hear or see themselves.)

Months later, one of the Planning Commission members expressed (on recording) that he did not like my 'intimidation' tactics of sitting there and pointing a recording device at them. He felt that this intimidation was forcing a change in the choices Town Council and Planning Commission members were making.

After spending some time trying to figure out how what I was doing could be intimidating (at least 3 minutes – I count the time required to pour a cup of coffee and sit down as part of my contemplation process), I determined that the only way this could be intimidating was if people did not recognize the voice and attributed comments to the correct individual. Yes, I could see where that could be perceived as being intimidating.

In order to rectify the situation caused by my 'lack of consideration', I began to look at other options. There were programs available that would allow me to turn the audio recordings into little 'mini-movies' where the speaker's photograph would be projected at the time the person was speaking. My first attempts at that had me pulling out my hair. It forced me to have to listen to the same recording for hours while setting the right faces to the right voices. This led me to wonder whether I needed to change how I was doing things before all of my brain cells ran screaming into the sunset.

I began to look at some other options and started checking on what it would take to create videos of the meetings and post them online. My first mistake was to go to professionals and ask them what could be done and how. Prices of \$10's and \$100's of thousands of dollars were tossed at me. More often than not, I was told that I could not do something like this, it would require experts to manage it.

A friend of mine once told me this definition of an 'expert': a drip under pressure. Based upon that definition, I am a bit of a drip and I was under pressure, therefore I was an expert and I could make this happen. My mother would tell you that she learned long ago that in order to get me to do something, simply tell me it can not be done.

I spent a good deal of time on the internet using Google and Wikipedia for primary sources of information in order to find out exactly what I could do, what I needed to do it, and how to do it. Several weeks later I had the information that I required to make the transition to video recordings.

Was I nervous? No, I was scared to death. I was about to spend some money on things that I had never used, to start a process that I was not sure I could get to work. But then, I had no knowledge or experience to help with the audio files and I managed to get that done. I have done a lot of videos since that time, and I still have some problems now and then and have to go back and start over on a project. However, the differences that this project has made in government-citizen interaction has been well worth the effort.

People are continuing to come to Town Council Meetings although Planning Commission (at 4PM) is still fairly ignored. On 'hot issues' we have standing room only crowds that extend out into the hallways. All of the Town Council Members are appearing in dress clothes rather than looking like they just walked off the golf course or appearing in shorts and t-shirts. More people are coming forward to speak up and the discussion that these comments lead to are leading to more informed decisions (this does not equal the 'right' decision in some instances but the "I did not know" excuse had been laid to rest.)

Now, you can go to MyVAResources.com and pick out a Town Council or Planning Commission Meeting online and listen to the discussion in the comfort of your own home. Using the additional resources on the website such as links to State and Town Codes, Comprehensive Plan, email address for officials, citizens can do their own research and then send their Town Council Members their opinions via email. This makes the process available to those whose work hours make it impossible to get to meetings. It also means that those people have a chance to hear the arguments presented by interested parties providing a broader view of how some decision will affect the community overall. Increasing public participation is what this whole process is about, and it works!

Video Presentations on the Internet

Why would you want to consider doing the work of recording meetings and events and posting them on a webpage? There are several good answers:

- Ease of Access
- Save money on printing and duplicating
- Reach a broader audience
- Make a point
- Be inclusive

As technology grows so does the use of the internet as a means of communication. The number of people using the internet to obtain information, go shopping, watch TV shows, and other options is growing daily. It is far more convenient than options such as attending meetings because it can be worked around a person's schedule so that they do not have to decide between watching their daughter or son's soccer game or going to a meeting. For the stay-at-home-mom with small children, she does not have to worry about choosing between the costs of a babysitter or having a chance to voice her opinion on decision that will affect those children. And, unlike a meeting, you can rewind sections or listen to the whole process multiple times if you wish (this is a great tool for dissecting political rhetoric).

Posting meetings and events online also means that you can save some money on printing or duplication costs if people want copies of the meetings that were recorded. While burning DVD's is pretty easy to do, it does take time and ties up the computer for each and every copy made. There are several populations who are not likely to attend meetings for one reason or another. Here are a few examples but I am sure that you can think of more.

- There are those who do not go out at night.
- There are those who can not afford that babysitter.
- There are those with limited mobility for whom getting out and into a building is a traumatic experience regardless of where they are going.
- There are those who may be sick at the time of a meeting but would like to be included.

For groups such as the League of Women Voters this form of communication offers a wealth of opportunities in voter education and encouraging citizen participation.

Streaming Video vs Progressive Video

There are currently two primary methods of transmitting video files via the internet.

- Streaming Video
- Progressive Video

Each of these has strengths and weaknesses and should be evaluated on what it is that you wish to accomplish.

Streaming Video may be a live or a recorded video presentation. It requires more equipment to manage the transmission of video because it is designed to send a continuous stream (flow) to the receivers computer. Many large companies can afford to buy the servers necessary to host this type of flow or to pay for a company to host it for them. I found that this option was cost prohibitive for me. In situations where you are trying to reach a large volume of people simultaneously, this method makes some sense because the bandwidth (amount of information passed along at any given time) is essentially the same whether it is viewed by 1 person or 1,000 people. If each of the 1,000 people were to watch the video at different times, then there would be 1,000 different interactions and the cost of the server would reflect that level of use. Estimates on the cost of streaming video per stream (information out) is about \$1-\$5 for 20-30 megabyte sized files. The average size of the meetings I record are 1 to 3 Gigabytes.

Additional problems arise as a function of bandwidth because if the end user has a low bandwidth connection, the streaming video can be grossly distorted. This means that the Streaming Video can provide a good quality video only when the provider they receive internet access from supplies them with the bandwidth needed to support the video stream.

The most positive reasons I could find for why someone would choose streaming video are:

- It supports transmission of LIVE events.
- It does not put a copy of the video on the end users computer where the video can be copied and redistributed.

The drawbacks are:

- More expensive
- More complex to manage
- *It does not put a copy of the video on the end users computer where the video can be copied and redistributed.

Progressive Video

This remains the most common distribution method for internet videos. Once the viewer clicks on the video, it begins to download on the viewer's computer where it is stored in a special area (cache). It may take some time for the video to completely download but the viewer can begin watching almost immediately. Those starts and starts that you may see with these is where the playing speed exceeds the download speed and it is necessary to wait for more of the video to download before the video continues. Many of these issues can be dealt with by simply putting a note on the page to remind the viewer to allow a few minutes of download time before they start watching. An additional note can suggest that if the viewer is having problems, they may wish to try restarting their computer (clearing much of the information stored in the cache, and opening up more room for video storage. (This was something that I discovered with my own internet usage.)

Regardless of the viewer's internet provider bandwidth, it is possible to watch high quality video. High bandwidth users will be able to see it more quickly than low bandwidth users, but it will be seen! The low bandwidth user may have to wait at times for more of the video to download, but the information

will get out to more people.

In short, Progressive Video is less expensive and more accessible. Those were two of my primary criteria for choosing the method of storage and transmission. It also meant that I could do the work myself, not having to pay 'professionals' and I would have full control over the videos presented.

****Note:** The only editing that I do of any of the government meetings is to split them, when necessary, to make files that are of a size as to be manageable for me and for the viewers. (More on this topic later.)

The most positive reasons I could find for why someone would choose progressive video are:

- It is the least expensive option
- It requires less equipment.
- It does allow for the viewer to store the video on their computer and look at it later.
- It is more easily accessed by people with old systems or slower connection speeds.

The drawbacks are:

- Sometimes has some stops and starts in the loading process (most often due to older computers with limited storage).
- Does not have a lot of fancy bells and whistles

Is the end-user's (viewers) ability to copy these files an issue?

One question was raised about the ability of viewers to download and modify video as a means of conveying incorrect messages. It is possible for someone to download/copy and edit virtually anything on the internet if they have the right equipment. By recording and posting these videos online, you as an individual or as a League are posting the original online. This forms a solid, factual recording that can be used to refute any distortions of the truth that appear! Thus, this service insures that the truth will be made known and that those trying to manipulate the truth (and campaign laws) will have a much more difficult time of doing so.

What Equipment Do You Need?

Website:

No matter how nice your recording is, or how informative, unless you are willing to let other people use your computer to view it, or burn CD/DVD's for distribution, it is not very effective. You need to have a way to get the material out to people and the internet is a great way to do this.

Websites are hosted by businesses that have large banks of servers. Servers are like having a lot of hard disks that are connected together and are also connected to the internet. This allows you to upload files and views to access them. These 'servers' are where you will put the copies of your documents, webpages, audios, videos, bloggs, etc. (uploading) for storage where other people can access them (downloading).

Most pay internet service providers (i.e., Verizon, ComCast, AOL,etc.) that you use in your home to access the internet, provide some degree of storage space on the internet. There are some free access (WiFi, NetZero, BamNet, FreeDialup.org, and others) that will allow you access but do not provide you with storage space on their server. Additionally, there are companies that you can pay to allow you to

store your information on their server.

Although our company (Dorsett Publications, LLC) has multiple websites on Citizen's in Floyd, VA, the myvaresources.com site was established on DreamHost. Citizen's is very reliable and cost effective if you do not have a large site. One of the best ways to guarantee that you have a 'large' site is to load video and audio files on it!

DreamHost provides us with unlimited bandwidth (what is required to upload and download files) and storage space. The company also allows for unlimited hosting of domains on one website. Most providers only allow for one or maybe two domains. (Domains are the name designations that makes your site unique like lwvmcva.org, myvaresources.com, vaopengov.org, etc.) By using DreamHost we can now host the MyVAResources.com site as well as the lwvmcva.org, vaopengov.org, and vaopengov.com (currently used as a test site to try out new features) which are all for the Montgomery County League of Women Voters. It also allows us to easily upload WordPress to the site which means we can run one or multiple blogs from that one site. Since Dorsett Publications, LLC actually owns the storage spaces for the sites, we pay a monthly/annual fee (watch for specials and you can get it at about the rate of \$10-\$15 per month). If you are representing a 501(C)(3) organization, they have an even better deal. They are good citizens and host these sites for FREE!

If you are only planning on having a few (1-3) videos online at any given time, many of the websites offered by the internet providers that you use will be more than adequate. If you are just starting out, this is a great way to learn the basics. (Oh! By the way, the first basic to learn: DON'T FREAK OUT!! So what if it doesn't work right, you go back, do it again, and learn from the experience!)

If you are fortunate enough to have several people that would like to be involved, the consolidated DreamHost type of site works really well because while one person has the full administrative rights, multiple individuals can be given access to upload, edit, create webpages, or manage blogs. Each one would have their own unique password and the Main Administrator would set the items upon which those people can work. In fact, it would even be possible to host all of the individual LWV's sites on one such server, with each smaller unit having its own specific domain. (This is a whole different topic on its own, but certainly offers a cost effective option with a lot of potential.)

However, you choose to 'publish' your audio/video files, you need to make sure that the server provides you with the bandwidth and storage space that you will need. The best way to find out is to contact that provider directly. They can advise you of any additional fees or limitations.

Let me add that there are free services available for publishing your videos. YouTube is one such example. The problem that I found with these is that you usually have to break your video up into pieces that are no more than 10 to 15 minutes in duration. When I tried doing this with some of the videos I had recorded, I found that doing this with a 1 ½ or 2 hour video resulted in a product that was too fragmented to accurately convey the tone and meaning of discussions. That is just my personal bias. You may have videos that work perfectly well with those limitations.

Camera:

The question of which type of camera to use is a pretty easy one to answer. What you can afford. What will do what you need done. I went with the cheapest means possible. I have a basic Sony Handicam that I got on sale for under \$300. Between the Camera and the software that comes with it, I can take photographs or videos, break up videos into photographs, create DVD' s, and store my files on a harddisk built into the camera or on the 'memory stick' type devices that you can buy in many different sizes. The camera comes with a battery and the length of time the battery lasts can vary depending upon the model that you get. A 2 hour battery came with my set and I bought an extra 4 hour battery for

backup purposes. When the Town Council Members here asked me about the length of time the battery lasts, I obtained great enjoyment explaining to them that I had a 2 hour battery, then pulling out the 4 hour battery as my backup, then, letting them know that a 10 hour backup battery was coming in the future.

Many of the cameras come with basic packages that you can then build upon by purchasing a lot of fancy extras. The extras are nice but not necessary. (** A bit of a tip here: If you do not wish to use a video camera, there are a wealth of free and low cost programs available that will allow you to add photos to an audio recording. This can be just as effective a tool as the actual video. It does mean that you will need to have photographs of the individuals available and match those photos to the audio recording.)

Computer:

Most of the computer systems that would have been purchased over the last 5 years or so come with programs designed to help people create movies, slide shows, and presentations.

MAC computers are well know for their ability to handle graphics and render a version that can be accessed over virtually any computer.

The same cannot necessarily be said for PC's. Fortunately, there are plenty of pay for and free programs that provide this.

Further more, those same computers typically come with adequate RAM (that front-end portion that holds what you are working on and the programs needed to be active) and hard disk space to accommodate your audio/video files. As you build an inventory of these files, you will start to see your hard disk space shrink (they tend to be fairly large files). You may wish to store copies on CD's/DVD's/portable hard disks to keep space on your computer available. Remember that even if you load your product on the internet, you need to keep a backup copy for emergencies or to simply make copies for people who prefer them on a CD/DVD.

The information available on the package the camera is in will tell you what operating systems, RAM, and hard disk space are required. You can find additional information on the websites of various camera manufacturers.

Patience, Patience, and more Patience:

What is lacking in this particular item can be made up for in pure stubbornness. I am a prime example of that.

Recording the meetings/events can be boring. In cases where it is not boring, it is possible to get caught up in what is happening and forget to adjust the camera to cover the person speaking. Although there are cameras available with the wide angle functions allowing for a full table of people to be seen at one time, I did not them very affordable. Instead, I have a camera that I mount on a tripod and turn to cover approximately half of the group at one time. This also allows me to turn the camera to audience members who speak at the meetings. It is particularly helpful to have another League member present to provide the occasional nudge to help you stay focused.

Once the video has been recorded, it must be transferred to your computer for further processing. There is software that comes with your camera that facilitates this. This same software usually provides you with all that you need to edit your files if it is needed. The ONLY editing that I do is where files are too large to be managed well. With the equipment that I use, I find that 45 minutes is a good average. In particular, anything over an hour I try to break down. This minimizes problems with trying to upload

very large files.

I do not edit any of the footage or conversation even when it captures me putting my 'foot in my mouth'. The first argument you will hear from those who oppose you creating this type of public record is that 'you can change it'. I always keep my self in a position where I can deny that happening. I also keep a full copy of the original, uncut, version on backup should a challenge arise. Obviously, this is not something that you need to worry about with meetings that are not governmental.

If you are going to use a medium such as YouTube to load your videos, you will need to do more extensive editing on longer videos. Typically, a 10 to 15 minute restriction is in place for videos. This means you may have to post a 1 hour meeting in 5 to 6 pieces. (My patience is non-existent and my stubbornness does not stretch this far!)

Once you have transferred your video to your computer and have edited it into sizes that work best for you, it is time to decide how you wish to load your video. The primary criteria to use should be accessibility. Which of the many formats offered allows for the easiest method for people to view your video.

This step may require additional software. I have found that AVS4U provides a package that meets all of my needs at a very reasonable price. (<http://www.avs4you.com/>). For \$59 I have access to all of their software and updates to it forever. They provide software for: Video, Audio, Burning (CD's/DVD's), a wonderful little media player that is very helpful for reviewing audio/video files, Firewall,, Registry Cleaner, and many other features.

I use their 'Convert to Flash' almost exclusively because the research that I did on the Flash version (.flv) was the most reliable format for the audience I wish to reach. The software to play these comes pre-installed on more computers than any other format for playing videos. If the viewer does not have the most recent version required to play it, the user will be prompted to update that product. Flash video formatting is also not subject to the whims of various computer operating systems. It works equally well on PC's, MAC's, Linux, Unix, etc. Flash files also work very well with different connection speeds. In short, by using Flash video format, I can reach the most people and provide the best experience for the end user.

The Flash video format more closely resembles streaming video in that it tends to load on the view's computer more quickly than WMV (Windows Media Viewer), Quicktime, and Real formats. It has been my experience that often the Flash video format creates a smaller file than the other options.

****NOTE: This Step Takes Time****I like the fact that the AVS4U Flash conversion not only converts the file, it does everything necessary to make sure the video has all that it needs to function correctly in one nice little file. The program allows you some choices as to how the 'player' that is presented on the webpage looks. Nothing fancy here, but you can make some changes as to whether the player looks 'wooden', 'glass', or 'metallic'. You will also need to determine the quality that you want to save you Flash video (I use optimal and it works consistently). AVS4U will create a folder with 5 objects in it:

- .htm – this is the webpage your video will be presented on
- .flv – the flash video itself
- .swf – the player that supports the video
- .js - a java script file necessary to connect all of it together
- .swf – sets the style of the player

You can edit the webpage created, but be sure to make your changes AFTER the last <div> line on the draft webpage or code. If you do not follow the directions (that have very good support on the AVS4U

site and in the online manuals to walk you through all the steps necessary), your video will not play – believe me – I KNOW!!

Once you have modified your webpage to include any additional information, you may wish to create a link on an existing webpage that will take people directly to that site. Otherwise, you will have to let people know where to go to find the video. I use a master list of audio/video files that identify the event/meeting by date and title and then use those as links to the specific audio/video file. People who use my site regularly know to go to my audio/video page, select what they want to see/hear and simply click the mouse.

This program also provides you with the information necessary to 'embed' the audio/video file onto an existing webpage or blog site. Embedding the file is the process of adding 'code' (all of that behind the scenes writing that makes a webpage look the way it does) to that of the website so that your video appears when and where you want it to on the webpage. I personally prefer to keep the audio/video files separate so as to minimize distractions from the topic at hand.

Now, you only need to upload the updated page with the link on it and the file for your video for it to go live. THIS STEP TAKES LOTS OF TIME!!! This can take as long as several hours depending upon your connection speed (limited by your online service provider) and the size of the files being uploaded. Fortunately, this process can be going on in the background while you work on other things. Whenever I am uploading these files, I try to stay away from any activities involving the internet because that affects the transfer rate of the files and creates a sluggish 'surfing' experience.

Instead, this is the perfect time to work on future blogs, spreadsheets from public documents I have on file, find a cup of coffee, or playing the occasional game of solitaire, cribbage or chess:)

If any of you decide to try your hands at working with audio and/or video files, I will be glad to help one-on-one. There is no way that I could write up something that would cover all situations and all equipment combinations. However, I can and will help anyone. Here are the various ways to contact me:

Phone: 540-382-6431 or 540-381-9064

Email: calindstrom@verizon.net

Email: carol.lindstrom@gmail.com

Or send mail or set up a time to meet in person at:

630 Depot Street NE

Christiansburg, VA 24073

Thank you for taking the time to consider helping to better inform our citizens by using the internet resources. These resources are not a replacement for existing forms of outreach, rather they can augment those to help reach a broader audience.

It only takes one person to do what I have done. However, it is a much easier process if you have a group of individuals, working together, to make these things happen. This helps to spread the work load and allows an individual to do more extensive research on different aspects of the process than I have been able to manage alone.

However you decide to manage your project, I hope that you have as much fun as I have had. The rewards have been well worth the angst and frustration I have felt at times.

Carol Lindstrom

