

Virtually every desktop and laptop computer sold today is a multimedia computer. It makes a lot of sense (no pun intended) to take advantage of those capabilities, though not gratuitously.

Audio and video will become increasingly important to web presences. Computers become ever more capable of delivering quality sound and video, and just as important, network connections continue to speed up - making sound and video files ever easier to access and play.

I believe that rather than the '500 channels on cable' we've all been hearing about for years, we're looking at the likelihood of 500,000 channels - or more - on the web (or some combination of the web and cable/TV).

When you can reinforce your message with sound and video while your audience reads your message, you'll get a lot more information through to the audience. If a picture is worth a thousand words, how much are fifteen pictures per second worth?

Much like I advise with print (if it is worth printing it, it is likely worth publishing it on your site), if you've got multimedia, use it. If you go to the trouble to print something, chances are it should be part of your web presence. If you go to the trouble to create a video presentation, whether for sales, instructions on the installation or use of your products - whatever the video is for - strongly consider making that production available on the web.

Streaming Media Technology

Audio and video are easier to deploy and use than ever because you no longer have to download audio or video files, you stream them. Streaming is comparable to what happens with new automobile CD players. These CD players 'read ahead' in order to store the coming stream of music in a buffer. When you go over railroad tracks, rather than skip, the players use the stream they've buffered to continue the music till you're over the bumps.

When you click on an audio or video stream on the web, the stream starts almost immediately. Often you don't hear or see the streaming file right away because the stream first fills a buffer.

Once enough information is buffered (enough so that the buffering program believes it can overcome any network congestion it may encounter - analogous to the railroad tracks example above) the stream starts to play through to the user's computer.

Two components are required for streaming media, a server (hosting) component and a

client-side (user's computer) component. The video is available in a number of formats. A market leader I recommend is RealMedia's Real Video (available at Real.com) for streaming. At one time, the Real Video and Real Audio formats sported roughly equal market share to Microsoft's Windows Media Player (which plays .wmp files). I wonder whether Microsoft's desktop monopoly and ability to tightly bundle their own media files will give them a streaming advantage. Even so, it appears to me that Real players, Shockwave and Flash by Adobe, windows media files and Apple's QuickTime format are among the topmost formats to be able to use and deploy.

Video

The video is becoming increasingly cost-effective. Video shops with twenty thousand dollars worth of equipment are able to do what shops required well over one hundred thousand dollars worth of equipment to do just a few years ago - and what required perhaps a half million dollars worth of equipment ten or fifteen years earlier than that. The rule of thumb prior to the early nineties was roughly \$2,000-plus per minute and up for video production. These days, only \$1,000 per minute could buy a decent five to seven minute corporate or product video production in its entirety, for use digitally on the web and on CD as well as for VHS tape distribution.

As I've said, if you have good video, use it. You may want to modify your video slightly for the web, as suggested below. If you are doing a new video, use the following tips and techniques to optimize your video for distribution and play in both traditional-video and web-video formats.

First, save raw footage. You'll want to edit differently for the web than you might for tape. For example, written bullet points on a corporate video (called character generation) work well in a traditional format, but not on the web. Web streaming isn't perfect. If titles "freeze" or the presentation skips, titles are easily made difficult to read if not lost entirely. Moreover, the video presentation window on the web is normally rather small and is played at a lower resolution than yielded by traditional tape. For the web, run the character generation in a separate text area, adjacent to the video presentation window (see the illustration in the color plates).

The sound is critical to any video presentation. The difference between a mediocre video and a good one is often the sound quality and content. Want to test that statement? Watch a few minutes of shark scenes from Jaws with the sound off. You'll wonder what all the excitement is about - the video is almost laughable. But add that familiar va-voomp, va-voomp, va-voomp heartbeat sound and you'll find yourself sitting on the edge of your seat

with a matching heartbeat.

One of my favorite corporate product video scenes is about a minute-and-a-half into the RamFlat.com RamFlat product video. Ram- Flat is a product that squashes 55-gallon drums like can crushers squash soda cans. When one of these drums rolls on its side and begins to settle like a coin that's been spun on a table and is beginning to flatten out ... the sound makes the whole thing - it sounds like a ninety-pound quarter making a drum roll as it flattens and settles.

Look for higher contrast shots for the web. Focusing on lots of similar shades can lead to dithering (the look of digital squares used to disguise faces of witnesses or whistle-blowers on television shows). You may want your shots on web video to linger on scenes a bit longer than traditional video so that the scene is played in its entirety despite any buffering problems you might incur.

Finally, when you offer video on your site, consider breaking up longer presentations into more discrete one or two-minute segments. You may still offer longer presentations in their entirety, but consideration for lower-bandwidth users suggests making clips available on an individual feature or benefit basis. These considerations should go into your initial video production.

Audio

If you use audio on your site, give the viewer control. Sound can be a great wake up and a great welcome on a web presence. Audio also wears very quickly to become a great nuisance.

Use sound to augment your visual message, though don't depend on sound alone to deliver any part of your message. Though most computers today are equipped to deliver sound, they may not be configured to do so at the time your site is being visited. Alert viewers to the fact that sounds are being played, via an on-screen control that pops up, in case they want to turn it up (or turn it down).

Flash

Flash is great if it has a purpose. Flash is used gratuitously too often to show off the talents of the flash author rather than to show off the salient features and benefits of businesses and their products and services. Flash is (or was - see Podcasting below) the de facto standard for complex animations using sound and text with motion to help get the

message(s) across. Flash projects should be projects unto themselves. I don't recommend holding a site launch up to wait for a Flash component. Nor do I recommend forcing Flash on viewers in a splash page, an entry page to a website that is there simply to show visitors how clever and/or stylish the web developers are. Always give users a (low-bandwidth) alternative to Flash presentations.

PowerPoint

For great Flash suggestions and demonstrations, see Adobe.com. PowerPoint presentations are readily transferable to the web. The chief mistake to avoid using PowerPoint is forcing the user to go slide-by-slide instead of giving the user control over when and where they go to get the information they want.

PowerPoint presentations require their own navigation within the context of the overall site navigation. Users should be able to navigate to any point within the presentation, as well as leaving the presentation to navigate anywhere within the overall site, at any time.

Be alert to the fact that PowerPoint easily allows the use of audio within presentations. If you use audio, again, give the user control. Microsoft offers excellent suggestions for the use of PowerPoint presentations, as well as other products, at Microsoft.com.

Podcasting & Video Blogging

Podcasts, whether audio, or audio and video, and video blogs (often called "vlogs") are the newest forms of web democratization. They are democratizing in that they empower virtually anyone with the basic tools - a high-speed connection, a decent computer, and a digital camcorder, extremely easy and inexpensive means to author audio and video productions. I'm listening to free business and technical podcasts as I write this. See iTunes.com for a huge selection of free podcasts (including "how to podcast" podcasts) as well as a huge "for-pay" library of audio and video.

See WebForging.com, WebLoggers.Org and WebLogging.Org for great information about, and examples of, podcasts and vlogs.