From the Desk of Paul Higginbottom

Multimedia: Trying to bring the sizzle and the steak together

What is this multimedia thing? We see it all over lately in the computer industry. But I haven't seen it well defined, at least not in terms of real things real people will use it for.

It seems to be any application that uses one or more of the following technologies: audio, video, interaction devices (mouse, joystick, keyboard, pens and touch screens, for example), and computers. But what applications need these technologies?

Besides the often mentioned but rather small market where business meeting rooms utilize some kind of elaborate multimedia setup to give presentations, I can think of only two: Entertainment and Learning / Training.

These of course, are huge but not entirely separate markets. Entertainment titles can subtly teach. This is sometimes referred to as ‘‘infotainment’’. And Learning/Training titles should be entertaining or ‘‘fun’’. ‘‘Fun’’ is forbidden in the business environment of course, so we use euphemisms like ‘‘morale-boosting’’ and ‘‘motivation tools’’ instead, but that's fine, we all know that learning should be fun.

These two categories could be referred to as ‘‘Consumer’’ and ‘‘Professional’’ instead. The only real difference between consumer and professional multimedia is that the former should allow us to have fun without making us think that we're working, and the latter should help us in our work without our bosses thinking we're having too much fun.

So is there something that makes the execution of a multimedia application different from a computer application? Let us assume that we're talking about an application where the users (viewers?) interact with an audio/visual experience to either have fun, or to learn (or both).

A very important issue that makes a multimedia application attractive in the eyes of the user is that there is no ‘‘dead time’’ in it. That is, there is no point at which nothing is going on, i.e., no audio, or motion on screen, or some stimulus, even something as simple as color cycling.

The reason this is so critical is that we're all so used to the biggest multimedia application there is: television. Television has developed to a point where there is rarely ever any dead time. If there is, we immediately realize something has gone wrong with the television station, and we prepare ourselves to see a message such as ‘‘Please wait, we are experiencing technical difficulties.’’

You may not think of television as a multimedia application because it isn't very interactive. But for many it is, because they talk to the commercials and commentators, argue and comment over televised sporting events, and try to guess the answers to questions on game shows.

This issue of avoiding any dead time is very important, and one you may not have considered because I recently realized that most technical computer people are used to lots of it. We wait for disks to format. We wait for applications to start up. We wait for source code to compile and link. We wait for font lists to be scanned. And so on. We may not like it but we tolerate it.

Television is at its best, its most exciting or compelling, when it seems to be non-stop. No dead time. No waiting for something to happen. Witness ‘‘blockbuster’’ movies, MTV, CNN, and good documentaries that teach us something. There's never any appearance of a static ‘‘PLEASE WAIT’’ message on the screen, or just a pointer sitting there, or a static screen with no audio. There is constantly moving video, changing audio, or a combination. The point I am trying to make is that multimedia will not be successful unless it is at least as interesting as television. ‘‘That shouldn't be hard’’ I hear you say. Well, in fact, it is. Probably a total of millions of years of effort have gone into television production techniques, finding ways to keep us ‘‘glued’’ to the screen, even being compelled to watch commercials. Multimedia should imitate and extend from lessons learned in television production. This is the benchmark multimedia must meet, and hopefully, beat.

A perfect multimedia title would be one that teaches in some way while you have fun using it. It combines the steak and the sizzle. The balance between fun and learning depends on the target audience. And most important of all, even though we computer people deal with lots of waiting around, multimedia applications should entertain the user at all times and never leave them with nothing to do, or see, or hear.

-PH