

**Challenge: Writer worked with public relations director of company to flesh out technical requirements of project. Then writer worked directly with CEO to craft the speech for a large keynote address to the SIGGRAPH (Special Interest Group for Graphics) convention.**

Are You Mission Critical?

Jeff Edson: Good morning. To open my presentation, I'd like to read you a quote from a recent article in Videography Magazine, written by a leading New York video editor at HBO studios:

"Last Fall, while deadlining a nonlinear edit, the computer went down. It was late Friday night and not one of the many suppliers to my system was answering the phone...except one; Intergraph Computers. The extraordinary lengths to which Intergraph people went throughout the weekend led me to believe that a fundamental change had happened in the computer world. Someone had finally arrived who understood a producer's needs."

Fundamental change. Think about this: In only three years, the entire armamentarium of the video producer, from camera to mastertape playback, has become virtually obsolete! Post houses, who had traditionally purchased millions of dollars worth of linear tape equipment with five and ten year amortization schedules are sitting with huge debts on equipment fewer and fewer clients want to use. Camera rental houses sit with analog tape cameras that can no longer earn enough cash to pay their debt service. Two-man project studios, running desktop PCs are winning animation contracts from houses with 25 full-time animators and as many SGI workstations.

This change is so monumental and so sudden, that the traditional suppliers of our industry's hardware have been outflanked, outspent and either bankrupted or seriously set back. The makers of high cost, high quality, task-specific products like character generators, special effects generators, switchers and digital effects systems have either ceased to be players or have repackaged their products as open platform, desktop PC software. The makers of linear tape transports have either taken their technology to other markets or are struggling to convert their products to digital formats and software enhancements. These companies, on whom we have built our industry, have satisfied us for decades with the prospect of "Good, fast or cheap. Pick any two." They are the losers. The winners are companies whose motto is "Good, fast and cheap. Get all three."

Good, Fast And Cheap (GFAC): The New Paradigm

To be sure, the past five years have been a very confusing time in video production. Some of us are nursing our old linear tape machines way past scrap date, hoping we won't be forced to invest in an interim technology. Others of us, with competitors salivating at our heels, have dived in with buck, brains and bankroll to find ourselves talking with tech support more than customers. Amid the chaos, have we stopped to think what the end point of development might be? What would be the theoretical goal of it all?

As I see it, the paradigm shift from "Good, Fast or Cheap," what I call GFOC, to "Good, Fast and Cheap" or GFAC, is based on the competitive thrust of digital technology in three areas of our business: Photographic Acquisition, Animation, and Post Production. Traditionally, each of these

areas had been dominated by a few key players who sold us GFOC goods with predetermined obsolescence schedules of three to five years. During that time, the role of the central processing unit or CPU and the operating system were mysteries to the average video professional.

As the desktop digital domain quickly acquired first text - By a show of hands, how many of you remember Wang wordprocessors?

Next came business math - let's see some more hands if remember Lotus spreadsheets.

Then graphics came into the computer - now everybody knows about Adobe Photoshop, right?

Soon after that we got sound from Creative Labs - what was the name of the card?

(Soundblaster)

Right, Soundplaster. Well, it became increasingly apparent that all of the elements of a video production would one day be manipulated in a computer. Slowly it dawned on us that we'd better find out what a CPU and OS did, because soon, we'd be doing our work there, not in linear tape.

As we began to buy desktop computers for our business needs, we began to understand how many of the GFOC products we had purchased in the past were merely computers that had been built and programmed for a limited set of tasks. One well designed computer, with the right OS, we realized, could easily be programmed do all of the tasks, vastly reducing our cost of production. Suddenly, we knew GFAC was possible and that maybe we were being ripped off.

With the advent of WindowsNT in 1993, we had an OS that was stable enough to withstand the rigors of a professional environment and intuitive enough for non-computer minds to operate.

With the Intel Pentium Pro also introduced in 1994, we had a CPU that could multitask reliably in WindowsNT at a speed that could support video production.

Suddenly, all of the elements were in place for a teleproduction revolution. Using Adobe Premiere and any one of several video acquisition and playback boards, broadcast video editing with outrageous special effects could be accomplished on a desktop PC.

Using NewTek's Lightwave program, the same desktop PC could be used to make sophisticated 3D animations. With the appearance in 1996 of low cost, digital format, 1394 compliant camcorders from Sony and Panasonic, the last frontier of GFAC, photographic acquisition, was conquered. Now it is abundantly clear that we are going to be producing on computers. What exactly do we need in a computer to make it every bit as good, fast and cheap as the traditional equipment we've become accustomed to?

Quick now, think of a brand name computer and just shout it out.

(Gateway, HP, Compaq, IBM). The name Intergraph isn't the first on your mind, right? Why is that? Are we newcomers here? Well, yes and no.

Intergraph Computers, headquartered in Huntsville, Alabama, began in 1971 with major computer graphics contracts for the US Government. If you've ever looked at government specification hardware, say a combat field radio or a Hummer, you know that over-engineering is the operating dictum. Price considerations, though important, are secondary to mission success.