High noon: big players ready for video showdown
Eric J. Adams
MacWEEK. 6.44 (Dec. 14, 1992): p46.

Abstract:

Nov 10, 1992 will be remembered as an important day to digital-video professionals because IBM, Microsoft Corp and Apple all announced developments that provide or will provide video standards making it easy to port movies between platforms. Apple is busy developing QuickTime for Windows, but it now faces competition from Microsoft's Video for Windows, and Audio Video Interleaved file format, as well as from IBM's upcoming 32-bit OS/2 Multimedia Presentation Manager/2 (MMPM/2), which will enable OS/2 users to view several video clips at the same time. Industry analysts indicate that it was not an accident that IBM, Microsoft and Apple made the announcements all on the same day. The coordination was a result of awareness by the companies that their products will need to operate on different platforms to be successful.

Full Text:

A flurry of emerging video standards from Apple, Microsoft and IBM allows for easy porting of movies between platforms.

By Eric J. Adams

If you are a digital-video professional or simply an aficionado, you'll want to remember the date Nov. 10, 1992. One analyst described it as "a digital-video multimedia day which will live in infamy."

What exactly happened on that day to merit such dubious recognition? Before noon Pacific time, Microsoft Corp. announced its Microsoft Video for Windows; Intel Corp. announced Indeo, its souped-up video-software compression scheme; Apple dropped the details on QuickTime for Windows; and IBM Corp. unveiled a 54-page white paper detailing its "multimedia computing vision," along with a beta version of its OS/2 Multimedia Presentation Manager/2 (MMPM/2).

Whether the day will live in infamy remains to be seen, but many users and analysts agree that by day's end many questions had been answered -and still more raised - about the future of desktop video standards and the role they will play over the next few years, particularly for multimedia developers.

Standard fare. Perhaps the most important development of the day for QuickTime title authors was that both Apple and Microsoft not only promised but delivered technology to make it easy to port movies across platforms.

At the same time, however, QuickTime, once the unquestioned video-authoring platform and distribution vehicle of choice, now faces stiff competition from rival Microsoft with its Video for Windows product and Audio Video Interleaved (AVI) file format. And early next year, Apple's foray into Intel-land with QuickTime for Windows will meet with more competition as IBM is expected to ship its 32-bit MMPM/2, which will allow OS/2 users to view several video clips simultaneously.

"It's no coincidence that these announcements came on the same day, " said William Coggshall, analyst with Pacific Media Associates, a Mountain View, Calif., market research company. "There's a recognition on everyone's part that this stuff has to work on multiple platforms. This is good news for authors who want to port their work across platforms, which is just about everybody."

Standards are important in all areas of computing, but they are critical in digital video because so many elements must come together to make movies, which are developed, ostensibly, to be distributed and played on many platforms.

Microsoft does movies. When Microsoft began work on its multimedia extensions for Windows 3.0, the company claimed there would be links to digital-media files. When it saw the success of QuickTime in the digital-video arena, the software giant rushed to acquire technology from a number of third-party vendors to piece together Video for Windows. But far from a hodgepodge product, Video for Windows is a good start, according to David Baron, associate editor of Digital Media: A Seybold Report, based in San Francisco.

"Video for Windows is the functional equivalent of QuickTime 1.0," Baron said. "It's not as good as QuickTime 1.5 but not as bad as it could be."

Video for Windows is three things: an extension to the Windows 3.0 operating environment, an architecture for encasing different media types and a retail product. Shipped in a shrink-wrapped box for $199, Video for Windows includes a set of low-end software tools for playback, capture and editing of video; three compressor-decompressor (codec) algorithms; and a CD-ROM containing hundreds of sample video clips.

Compression drop. Using Intel's Indeo compression technology, Video for Windows offers what Microsoft is calling "scalable performance," a feature (such as QuickTime's) that automatically adapts the size and frame-per-second rate of the image to the hardware available in the playback computer without the user having to change the software or the video file.

With Video for Windows, for instance, a movie played on a 386-based machine without additional video hardware will be displayed at one-tenth screen at 15 frames per second. The same movie on a 486 processor will play on one-quarter screen at 24 fps. If you add in a video accelerator, such as those based on the Intel i750, the movie will play on the full screen at 30 fps on either the 386 or 486.

More importantly, Video for Windows brings this capability to Intel-based machines - a market 10 times the size of the Mac market. Although Intel's DVI (Digital Video Interactive) has provided this capability since 1987, the fact that users had to send their video clips to Intel for processing may have kept it from becoming a standard.

"For business users, all this is a very strong statement because [Video for Windows] grafts onto existing applications and skill sets," said John Donovan, analyst with WorkGroup Technologies, a market research and consulting company in Hampton, N.H.

QuickTime crossover. Most importantly for QuickTime developers, since Video for Windows includes a utility to convert QuickTime movies to AVI format for playback in the Windows environment, the potential audience for QuickTime-developed movies has grown overnight by 14 million, the estimated number of Windows users worldwide.

During the Nov. 10 unveiling of Video for Windows, Microsoft CEO Bill Gates announced that in the second quarter of 1993, Microsoft will make available, free of charge, a utility that will act as a QuickTime player for AVI files.

Out of the box, Video for Windows supports OLE (Object Linking and Embedding), which means that more than 150 existing Windows-based applications automatically inherit digital-video capabilities.

"Users of standard business applications can drop in a video segment just like any other data type," said Rob Glaser, Microsoft vice president of multimedia and consumer systems.

Though drop-in video may seem like old news to QuickTime developers, Video for Windows has other things going for it, according to Bill Caffery, vice president and director of Advanced Technology Groups for The Gartner Group, a Stamford, Conn.-based market research company.

"Video for Windows is better- designed [than QuickTime] to accommodate future strides in compression technology and the exploding market of board vendors that will be compatible with the AVI file format," Caffery said.

Apple ups the ante. Still others believe Apple has the digital-video plum with QuickTime. "What Microsoft has done is physically two years behind QuickTime," said Rick Doherty, editor of Envisioneering, an industry newsletter based in Seaford, N.Y. "[Video for Windows] offers neither the cleanliness nor the surprise-free results that you get on the Mac. If I were to start authoring tomorrow, I would author on the Mac and publish on the PC."

Joan-Carol Brigham, director of graphics and multimedia research at International Data Corp., a Framingham, Mass., market research company, agreed. "Apple definitely has the leg up. On the Mac, the sound is there, the video subsystem is there. Video authoring is no big deal." But, she said, "Apple is going to have to work like crazy because Microsoft is going to be incredibly effective at getting the standard out there cheaply."

In October, Apple upped the ante again with QuickTime for Macintosh 1.5, which provides higher compression ratios; support for Eastman Kodak Co.'s Photo CD technology; full-screen, full-motion video with add-on hardware; bigger screens for software-only playback; a d an improved user interface, as well as other improvements.

And unlike Video for Windows, which will cost users $199, QuickTime 1.5 is free of charge for Mac owners, available with System 7.1 or via bulletin board and user groups.

A window to QuickTime. Three weeks after the release of QuickTime 1.5 (and literally minutes before the Microsoft Video announcement), Apple lifted the curtain on QuickTime for Windows, its initial implementation of the

QuickTime architecture for the Windows environment.

QuickTime for Windows 1.0 provides Windows users with enough software to play back and control QuickTime movie files and compressed still images. Unlike Video for Windows, QuickTime for Windows is not a retail product; rather, it is being sold as a software development kit for $295 to programmers and developers, who can add QuickTime playback capabilities to their applications with Dynamic Link Libraries.

The initial release of QuickTime for Windows does not support OLE, although support will be included in Version 1.1 of QuickTime for Windows, slated for release in February 1993, according to Mike Holm, Apple product line manager for cross-platform technology. Version 1.1 also will include full support for Intel's Indeo codec and include Compact Video, Holm said.

Out the window. But the biggest news about QuickTime for Windows is not what's in it but what's been left out. It doesn't include support for the Media Command Interface (MCI), a set of software-access protocols developed by Microsoft and IBM. MCI allows all Windows-compatible application software to control a variety of multimedia devices, including CD-ROM drives, audio and animation players.

"Apple has said all along that QuickTime for Windows wasn't going to be MCI-compliant. But it makes you step back and ask, why not?" said one consultant who asked not to be identified. "That means application developers have to recompile code to work with QuickTime for Windows. No vendor likes to do that, and I think it was a terrible strategic mistake on Apple's part."

Dueling standards. Apple counters Microsoft on several fronts. First it quickly provided a list of vendors that have promised support for QuickTime for Windows. The list includes such heavyweights as Lotus Development Corp., Macromedia Inc., WordPerfect Corp., Corel Systems, Adobe Systems Inc. and Claris Corp., among others.

Finally, Apple argues that QuickTime is simply the superior digital-video architecture. "Microsoft Video for Windows demos well, but the veneer is thin," said Apple's Holm. "Its file format is not that rich, it can't have multiple sound tracks, and [audio-video] synchronization wanders.

"Meanwhile, you can create a QuickTime movie that has several different language soundtracks, and QuickTime will automatically figure if the machine is running the Japanese, French or English operating systems; decide which soundtrack should be played; and play it in 24-bit-, 16-bit- or eight-bit-color mode. QuickTime can figure out the optimized image display," Holm said.

Both QuickTime for Windows and Video for Windows include Mac applications that allow you to convert Mac QuickTime files to Windows format. It remains to be seen if AVI-formatted files will require conversion to run on the Mac.

"QuickTime runs on both machines, it looks great on both machines, and it will save users a lot of grief," Holm said.

Nevertheless, Holm said Apple is "considering" MCI support in future versions.

Out of the Blue. IBM, meanwhile, is trailing behind both Apple and Microsoft with its Ultimedia multimedia architecture, according to many analysts. Ultimedia is an open architecture designed to run on DOS, Windows and OS/2 machines. To date, only a few third-party vendors have promised support, and the multimedia version of Presentation Manager 2 just went into beta with no shipping date announced.

The IBM white paper relies heavily on the promise of future technologies, such as ScriptX, the object-oriented scripting language developed by the Apple-IBM joint-venture Kaleida Labs Inc. Most analysts, therefore, are placing their bets on Video for Windows as the video standard on the Intel side, and QuickTime on the Macintosh.

Standard and deliver. But the competing formats will meet the demands of different users, according to Greg Sheppard, principal analyst with Dataquest Inc., a San Jose, Calif., market research company. "The average Video for Windows user will be someone playing the stuff back. QuickTime is targeted more at developers."

Few analysts, and even Gates, doubt that Video for Windows will persuade QuickTime authors to switch platforms. "In the Windows environment Video for Windows will be dominant, and in the Mac environment QuickTime will be dominant," Gates said during the news conference announcing the availability of Video for Windows.

"The real winner of all this is the title author," said Pacific Media's Coggshall. "They don't have to worry about distribution anymore. Movies developed on one platform will play on another, and while there are still minor problems with conversion, it's nothing in comparison with the other unnatural acts that multimedia developers have

to perform everyday."

Still others believe it's far too early to tell which system will be dominant or even what each will look like by the time desktop video makes its full impact in the corporate world. "It will clearly take several years for video to become a broad horizontal business technology," said Nick Arnett, president and chief analyst of Multimedia Computing Corp. of Campbell, Calif. Until then, QuickTime authors can enjoy the best of both worlds: QuickTime authoring and PC distribution.