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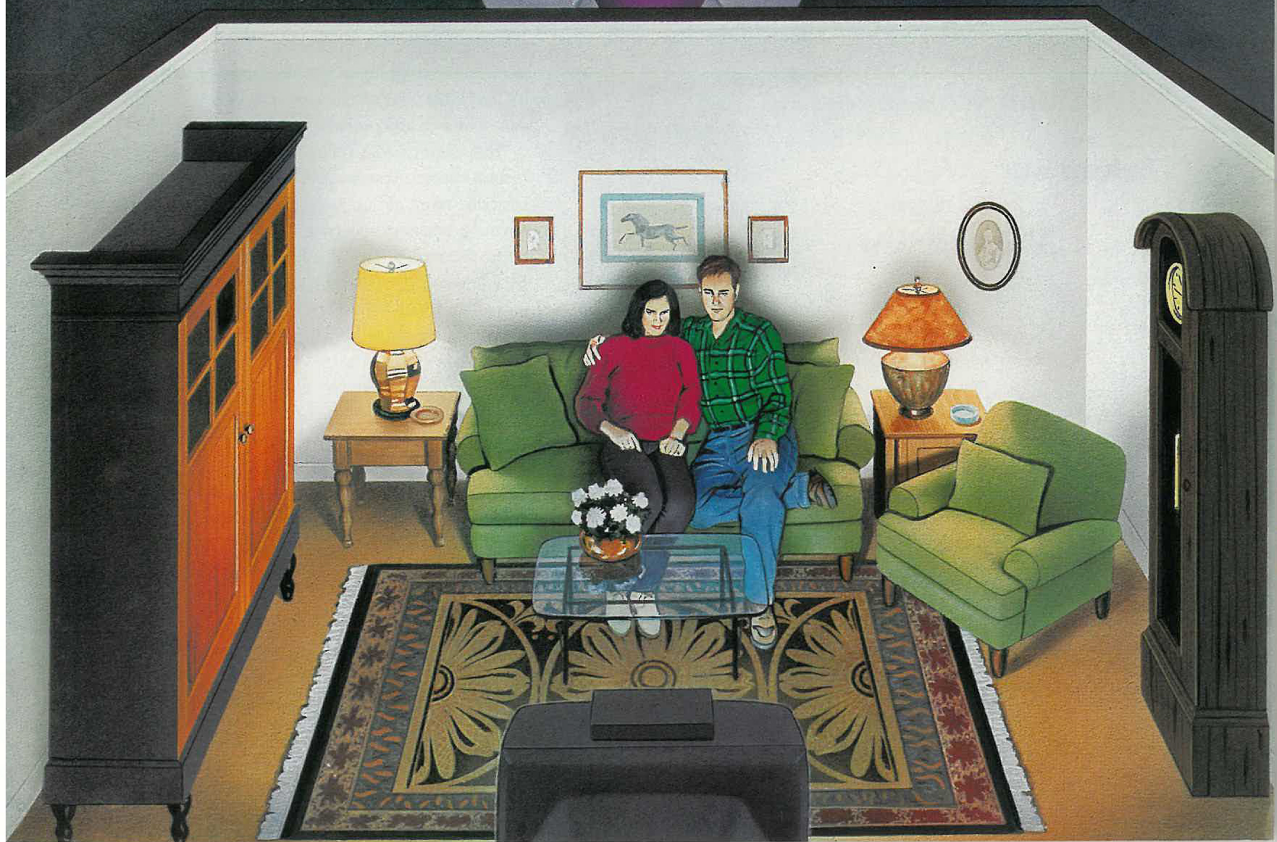
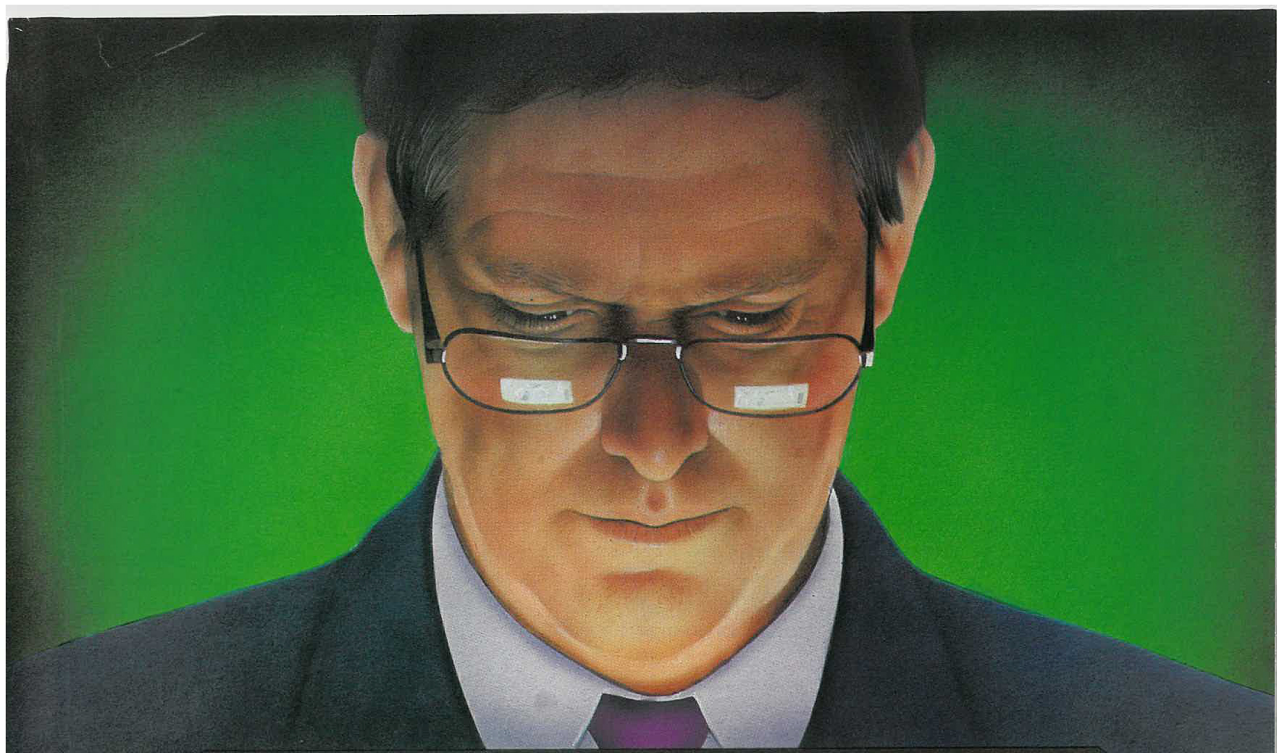
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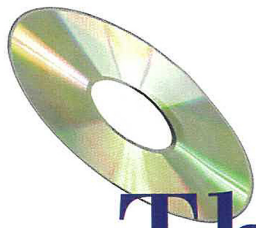
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# The Divx Fiasco

The news ripped through the *Home Theater* editorial offices as it did through the entire consumer electronics industry: with the speed and foreboding of a nuclear shockwave. Suddenly, one day in early September, there were surprise newspaper headlines foretelling future format wars; phones everywhere ringing off the hook, driven by the swelling fury of inquiries from the incredulous and the opinionated. Did you hear? What does it mean? How did this happen? And what, exactly, is "Divx"?

Good questions, faithful reader, and we will endeavor to answer them, for it is the least that is owed to you in the aftermath of what must now be known as the Divx Fiasco. It's not my usual habit to head straight for the barn, but we must note up

front that whether Divx succeeds or fails—merits or faults notwithstanding—there is no denying the damage that has been done by virtue of its announcement six months after the first DVD players began flooding into stores. If you bought one of those non-Divx players, perhaps on our earnest recommendation, you may or may not have reason to be concerned for its long-term utility. As you'll see, a lot depends on future developments that are difficult to predict and only partially in your control.

But what *is* certain is that you, along with many of us in the consumer electronics press, have been misled. We could argue about who knew what at what time, and which entities should endure the wrath of as many as 100,000 owners of DVD players who now must wonder whether their purchase is headed toward premature

obsolescence. But no matter where we appoint blame, in the end the fractious consumer electronics industry has no choice but to accept responsibility for how it treats its constituency. If Divx has proven anything, it is this: Despite a celebrated cross-industry agreement produced by more than a year of discussions among hardware manufacturers, Hollywood studios, and computer interests, no amount of negotiation will ever deliver an

ironclad standard that can be counted on by *you*, the so-called "early adopter." A prominent speaker manufacturer who, like many sources for this story, spoke freely only on condition of anonymity, summed it up. "I think we are letting the consumer down," he said sadly. "We have taken our strongest supporters and have made them dis-

trust us. I am personally embarrassed to be thrown into the pot with something like this."

**After months  
of negotiation,  
DVD was supposed  
to be a done deal.  
Then came Divx,  
and its implications  
of Big Brother.**

**by Rob Sabin**

## The New Paradigm

Divx is an acronym for Digital Video Express (DVE), the start-up company now promoting the eponymous technology. The limited partnership is two-thirds owned by Circuit City Stores, a public company and the largest consumer electronics specialty retailer in the country, with \$7.15 billion in CE revenues reported for fiscal 1997. The other third of DVE is controlled by Ziffren, Brittenham, Branca, and Fischer, an immensely powerful entertainment-law firm in Los Angeles with strong ties to the movie studios and many top Hollywood stars. Simply put, Divx is an automated "pay per play" movie

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sale/rental system, and DVE's goal is nothing short of altering the long-established distribution model for video software, and—more significantly—changing the rental habits of millions of video consumers. If you've not heard how the system works, here are the facts.

Assuming Divx enters the market as planned, by next summer you'll be able to purchase a Divx-equipped DVD player for about \$100 more than a regular DVD player. The premium covers the cost of a built-in modem that connects your player to DVE's computerized billing system through an existing phone line, as well as internal circuitry and software enhancements required to manage the system. Divx machines will play standard "open" DVDs and music CDs, as well as special Divx DVD discs that contain additional security coding. But Divx discs cannot be played on today's existing DVD players, and, according to DVE officials, there is no way to upgrade them to do so.

At this writing, DVD hardware licensees include Thomson (selling under the RCA and ProScan brands), Matsushita (Panasonic), and Zenith, which will be first to offer a Divx DVD player when it rolls

**"I think we are letting the consumer down. We have taken our strongest supporters and made them distrust us."**

out an Inteq-series model in Circuit City stores next spring as part of a limited test market. Hollywood studios that will issue software include Disney's Buena Vista Home Entertainment, Universal, Paramount, and DreamWorks SKG. DVE says that the studios have signed multiyear contracts to supply, collectively, all of their new titles plus about 1,000 catalog titles on Divx; more than 100 titles are expected to be available at launch, with that number growing to 500 in the first year. The studios will make all new Divx titles available simultaneously with the corresponding VHS tapes—something that has been avoided in the past with high-resolution DVDs and laserdiscs because of concerns over piracy during a new title's "hot" rental period.

Divx discs will be what DVE is calling "disposable," though a Divx disc is no different in composition than today's polycarbonate-plastic and aluminum DVDs. The discs will carry a suggested retail price of \$4.99, which includes ownership of the disc and the right to a 48-hour rental period that begins only when you put the disc in your machine and press play. You can play, stop, pause, rewind, fast forward, or replay that movie as many times as you want during your 48 hours.

Once you begin playing that disc, a record of your action and any subsequent activity is stored in the player's memory until, eventually, the player dials up Divx central billing to report on your usage. As with the pay-per-view transaction system used in DSS satellite receivers, these short-duration downloads will occur during off-peak hours. The system will break off communications if any phone extension in your home is lifted, and DVE pays for the call to their own toll-free number. Note that the machine does *not* dial out each time you play a movie, though the frequency of these dial-ups is "still under debate," according to Paul Brindze, the president of DVE's Divx Entertainment division, and a partner at Ziffren, Brittenham, Branca, and Fischer. Brindze calls that decision "a trade-off between piracy protection and economics," and says it's likely that your machine will call Divx no less than once a month, and probably once every two weeks.

When your two-day rental has expired, you have several options. You can, as DVE implies, throw the Divx disc away, although they would rather you add it to your permanent collection. If at any time in the future you wish to view that film again, you drop it back in your player and initiate another 48-hour rental period, for which you will be billed an amount expected to be something less than your original \$5 purchase price. The charges will be paid through a credit card account you set up with Divx by telephone when you first bring your player home.

Some Divx rental discs will be upgradeable from your home to Divx Silver, which will allow unlimited viewing in exchange for payment of a one-time fee. Note, however, that you can only play your Divx Silver discs without further charge *on players registered to your own account*, which might include multiple players in the same household and others at a secondary residence. If you take an upgraded rental disc to your friend's home for viewing on his Divx player, he will be billed for a 48-hour rental, despite your having already paid for unlimited viewing of that disc.

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On the other hand, if you wish to play a Divx movie an unlimited number of times in *any* Divx player, you can purchase a Divx Gold DVD. The only difference between a Divx Gold and an open DVD will be the additional encryption that is said to protect the Divx disc more aggressively from piracy and prevents it from being played on a conventional DVD player.

DVE's Brindze says the price for a Divx Gold disc and the cost of upgrading a disc to Divx Silver status is in the hands of the studios, and could vary from title to title, just as the studios will determine which titles will be made available on Divx Silver and Gold, and when. Likewise, it's not clear yet whether your repeat rentals on some discs will accrue toward Divx Silver status.

**"There was no one who was a part of the DVD Consortium who did not know that we were there."**

However, it is expected that the cost of purchasing and upgrading a rental disc, and that of a Gold Divx, disc will be competitive with open DVD.

Before moving on, it's worth clearing up a few additional issues that have been raised about the Divx system.

- Initial Divx rental releases will be single-sided, single-layer discs that won't offer the extra widescreen version that many open DVDs offer today. (Extra-long films *will* be issued on dual-layer Divx discs, however.)
- Your Divx Silver discs come along for the ride, without you incurring extra charges, whenever you upgrade or add a Divx player to your account.
  - Partially-played Divx discs can be moved to another player without charge as long as the player is on the same account.
  - Divx DVD players will include parental controls to prevent little Johnny from playing five minutes of every Divx disc in your collection while you're out, thus incurring \$600 in 48-hour rental fees in less than four hours.
  - Divx playback privileges will eventually be suspended if phone trouble prevents communication with Divx's central computer, but only after repeated onscreen warnings to the user.

### The Forsaken First Adopters

One of the great ironies of DVE's "surprise" announcement of Divx is that virtually everyone in the consumer electronics industry—except the buying public and most of the press—knew it was coming.

The system was the apparent brainchild of Skip Brittenham, a partner of the law firm that bears his name and that is now itself a partner in Digital Video Express. In 1994, Ziffren, Brittenham, Branca, and Fischer (ZBB&F) invited Tom Shaeffer, an accomplished consumer electronics engineer, and his company, Nuronet Corp., to make a feasibility presentation on some encryption technology. What followed was a relationship that lasted through the end of 1995, when Shaeffer split off to pursue other independent projects. During his tenure, Shaeffer told *Home Theater*, he functioned as the chief architect of what was then being called Zoom TV and is today known as Divx. As such, he has a broad and enlightening perspective on this technology, which I'll share later in this story.

At or around the time work began on Zoom TV, ZBB&F began seeking outside support for the project. Circuit City invested \$30 million in 1994. "The law partners who conceived the system came to us because they wanted to know, if they made it, would we sell it," DVE and Circuit City CEO Richard Sharp told reporters at the press conference announcing Divx. "We said yes, and furthermore, we'll help you make it." Circuit City has since pledged another \$100 million dollars for use in further developing and launching Divx.

Studios and CE manufacturers were also approached early in the process for technical and licensee support. Zenith, according to a company spokesman, has "been involved for a couple of years" after being approached by Circuit City, and the industry newsletter *Audio Week* reported that all three Divx hardware licensees have contributed technology to the Divx system, suggesting whatever lead times that might entail.

Other manufacturers and studios selling DVD today were approached by Circuit City, as well, and some went as far as conducting consumer focus groups before declining participation. But while many companies got the knock on the door and recognized that Zoom TV could become a reality at some point, no one let on what they knew. "This process has been underway for a long time," explains a DVD marketing executive at one of the Divx dissenters. "It's involved many manufacturers and studios, and it's been done under

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strict NDAs [nondisclosure agreements] so that everyone had their hands tied as far as making any announcements." As for why Divx's developers shrouded it in secrecy, Sharp argues that "it would have been reckless" to discuss plans for Zoom TV in advance of lining up software and hardware support, though consumer electronics buffs can attest to the fact that it is often done the other way around.

Of course, even if manufacturers could have shouted Divx to the world, it's not likely they would have. By early this year, marketers like Toshiba, Sony, and Pioneer, who had worked hard to bury their differences in the Consortium that produced the DVD standard and had staked their futures on an open DVD format, weren't looking to throw any wrenches into the long-awaited product launch. Perhaps these and other companies were unaware of the momentum Zoom TV had built with other vendors, or perhaps

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Richard Sharp told reporters,  
"Early adopters do  
take some risk...  
it's regrettable."**

they were in a state of denial about a technology they had been offered but had rebuffed for whatever reason. Nonetheless, "There was no one who was a part of the DVD Consortium who did not know that we were there," says Divx president Brindze. "Whether or not they thought we'd establish the critical mass of studios and manufacturers that we did was a judgment on their part.... It was not our decision not to be part of the DVD standard."

Meanwhile, DVE's announcement of Divx on the eve of the critical fourth-quarter holiday selling season, and in the absence of any Divx hardware or software to sell, has brought the company under fire from critics who see the timing as part of an effort to stifle further market penetration of open DVD in advance of Divx's arrival. While potential consumer confusion could hinder current DVD sales, which could play to DVE's benefit, the truth might be less sinister. "If you want to blame anyone, blame the

S.E.C.," says Brindze. "Things had reached the point where bringing the product to market required a significant investment by Circuit City. They have to be public about that. We wouldn't have [announced at that time] if we were looking at it strictly from a marketing standpoint."

For their part, consumer electronics manufacturers, including some of the Divx licensees, plan to follow through on their DVD holiday promotions. And with the possible exception of Circuit City stores, potential DVD customers are not likely to see signage or hear salespeople disclosing the pending Divx technology unless they ask about it first. What about the thousands of consumers who have already bought or will buy open-DVD players without Divx this fall and spring, thinking they're getting a unit that will play all available DVD movies? Well, tough luck. As noted, there's no upgrade path for open DVD players, and none of the DVD marketers *Home Theater* contacted are currently planning any upgrade or trade-in programs for open-DVD buyers. As Richard Sharp told reporters, "Early adopters do take some risk...it's regrettable."

### Can it Fly?

Not since someone decided to hand out condoms in high schools has anything generated as much gut-level emotional reaction as Divx. The negative outcry from enthusiasts, expressed almost instantaneously on the Internet, was overwhelming. Equally loud, though a bit less nasty, was the reaction from independent video retailers, most of whom view Divx as a threat, both because it cuts them out of repeat rental activity and because it allows virtually any type of retailer to get into a form of the video-rental business. Consumer electronics retailers in general are also pretty steamed about possibly having to sell a technology that will generate a revenue stream for their competitor Circuit City—though like most CE manufacturers who oppose Divx, they won't say so publicly for fear that they may have to jump on the Divx bandwagon if consumers demand it.

Whether consumers will, in fact, demand Divx is the question of the day. There's no denying that the idea is damn clever and has its appeal. You can't overestimate how folks hate rushing madly out of the house at 11:55 p.m. to return a video, or how serious a problem some people have with recurring late fees

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due to forgetfulness or conscious disregard. Besides eliminating these headaches, Divx's supporters say it'll make DVD accessible to millions more eyeballs by expanding distribution and satisfying the surge of demand that usually follows a film's initial release. And since Divx players also play open DVD, Divx could help grow the open-DVD market as well.

But some valid criticisms have been raised, too. Not the least of which is that consumers may just find Divx too confusing, what with Divx and Divx Silver and Divx Gold discs, and all the rules for playback. "It makes you wonder what happened to that phrase 'KISS'—keep it simple, stupid," says Bruce Apar, the editor of *Video Business* magazine. "They seem to be going in the opposite direction and making it as confusing as possible. It shows a shocking lack of understanding of the public."

Even if a consumer decides Divx is not rocket science and is willing to pay the \$100 premium for a player, there are still other issues to consider. One is the required phone connection, which may require the installation of a jack, and what some see as an invasion

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of privacy. Regarding the latter, DVE's Brindze counters by pointing out that the system is only designed to collect information on which Divx discs you watch and when you watched them, and that the information collected is subject to the Video Privacy Act, the same federal legislation that prevents your neighborhood video store from selling your personal rental history to the *National Enquirer*. Of course, that may not stop DVE from using that information for special promotions you might receive through the mail or the "digital mail box" built into every Divx DVD player. It's not inconceivable that after buying four Arnold Schwarzenegger action flicks over six months, you'll turn on your player and get a message suggesting you upgrade them to Divx Silver discs for the discount price of whatever, and please do push the button now,

thank you. For some people, this will be a notable benefit. For others, it will be...creepy.

Still, despite the potential drawbacks, it's tough to make a judgment about Divx's future without putting the product in the market. "This is an intriguing technology," says *Video Business*' Apar. "I don't think anyone can say yet that it won't be accepted or that it's seriously flawed. It may be one of those things that consumers take to."

### **Format Follies**

So how does this ultimately affect you? Will the advent of Divx hinder your ability to get the most desirable titles—or any titles at all—on open DVD? And should you buy a DVD player now, or wait six months or longer to buy a Divx-equipped machine?

Sorry, but we can only help you guess. A lot depends on whether Divx is accepted by the marketplace, and how far the studios are willing to go to promote it. If Divx takes off and surpasses open DVD, there's no way of knowing how long Hollywood will continue to support the latter, despite the studios' promises to the contrary. On the other hand, if consumers use the next few months to buy DVD players and discs in quantity before Divx arrives, it may give the format a strong leg up that could ensure its long-term survival.

I should note that DVE and the Divx licensees have steadfastly maintained that Divx is an "enhancement" or "step-up feature" of DVD, rather than a de facto new standard, and that both Divx and open DVD can peacefully coexist. But history has shown that issuing the same titles in two different but similar formats—as with VHS and Betamax—confuses consumers and infuriates distributors and dealers who must find the room to stock and display both types. With Divx in the market, the same movie might have to be stocked in as many as three different versions—open DVD, Divx, and Divx Gold.

Now, you may argue that that's not a format war, but it's gotta be a kissin' cousin. And eventually, every format war has a winner and a loser. "It's hard to imagine [open DVD and Divx] both existing in the marketplace for very long," says Apar. "I don't think the public or retailers will support two different formats."

Jeffrey Eves, the president of the Video Software Dealers Association, agrees, but points out that the industry tried to avoid this situation when it put pressure on Toshiba and Sony to settle on a unified

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DVD standard. "I think we have seen again and again that consumers and retailers don't want a format war," he says, "and if you present us with one, we'll sit on the sidelines until it's over."

Until next summer, of course, there is only DVD. And the open DVD camp, led by industry market leaders Toshiba and Sony, is quick to note that software and hardware support is stronger than ever. At least 25 players in 16 brands are now or will soon be available, and the number of software titles in place for the holidays is close to 400—nearly four times original estimates. What's more, the hits just keep on coming. Though Divx-licensees Paramount and Fox continue to be DVD holdouts, Warner Home Video has upped its profile by promising to release open DVD titles

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day-in-date with VHS. And Universal, although they're supporting Divx, has bolstered their initial release schedule of 10 open DVD titles (including *Jurassic Park*) to more than 60 films; the studio also plans to release open DVD day-in-date with VHS, and the firm's president, Louis Feola, has said that Universal intends to make all its Divx titles available on open DVD as well. Even Disney has said it will release some unspecified number of open DVD titles for the holidays, though it hasn't said which ones or how many.

All signs are that the DVD rental market is growing, too. A recent survey on the *Home Theater* Web site asking readers if they were able to rent DVDs generated hundreds of responses from all over the U.S. and Canada. Many respondents cited independent video stores, as well as the giant chains like Blockbuster and West Coast Video as offering DVD rentals. Virtually every store we heard about was renting DVDs for the same price as a VHS tape or laserdisc, with most at \$3 for a one- or two-day rental. While no one's claiming a spectacular success, or even profitability, for these initial efforts, West Coast's VP of movie management Tom Foltz and other dealers

are seeing a steady pattern of growth. "We see the market as still young, but we plan to open departments in additional stores now that the software is more readily available and more studios are doing DVD releases," Foltz says. It's also been suggested that the threat of Divx may even force reticent video retailers to jump into the DVD rental market.

It's not clear when a critical mass might be reached, but if the specter of Divx doesn't stall consumer sales, and assuming rental stores don't run into problems with DVD durability (which some heavy renters have been reporting), the holiday promotions on players and software could be enough to generate some serious momentum. At the same time, Divx faces uncertain support at retail. DVE had been counting on video retailers to embrace the format, but the independents, at least, have sworn off it. Under the current Divx economic model, dealers will make anywhere from \$1 to \$1.50 per disc sold—far less than most make today on a typical tape rental. That alone makes Divx unattractive to them—even without the fact that the Divx customer has no reason to return to the store to buy or rent something else. And while Circuit City will obviously be out hawking Divx players in a big way, it remains unclear if other big CE dealers will follow suit. Best Buy, Circuit's arch enemy and the U.S. market-share leader in DVD, issued a terse but ominous statement: "Best Buy is the nation's largest retailer of DVD video hardware and prerecorded DVD software," it said, "and we support an open-architecture DVD format."

Should Divx stumble, it's been suggested by some critics that things could get ugly quickly for DVE and Circuit City. According to the figures Circuit City released to analysts, as reported in *Video Business*, DVE will be taking a pre-tax loss of about 75 cents on every disc it sells for "several years" until volume comes up and its manufacturing, marketing and overhead costs shrink. Once that happens, and the firm reaches its planned 20 percent of the total video-rental market (about 800 million annual transactions), it stands to make upward of \$600 million a year in profit. But if consumer support for Divx fails to meet targets, there's only so much patience Circuit's shareholders are likely to have.

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The bottom line is that there are no guarantees that either standard DVD or Divx will coexist peacefully or survive long term. If you own a DVD player today and have concerns about future software availability, your course of action should be to send a message to the studios by continuing to buy discs, and bugging your local video stores to start renting DVD. On the other hand, if you've been hot to buy a DVD player, and you don't care for the benefits Divx offers, you've still got some soul-searching to do before you plunk down your cash on a non-Divx machine. But if you can accept that there may be some Divx titles you'll have to wait for or won't get on open DVD, then your purchase of a machine today can only lend support to open DVD's long-term survival.

### **The Divx No One Knows**

Before closing, I'd like to leave you with some food for thought. Let's just suppose that Divx wasn't so much about video, but about something much, much bigger. What if Divx movie players were really about ushering in the next wave of digital online

**Is Divx capable of doing an end run around Bill Gates and all those other visionaries struggling to make cyberspace the next giant shopping mall?**

commerce—a kind of Trojan Horse to get the great masses comfortable with the notion of buying by wire. An innocuous little home video system, that, in fact, is capable of doing an end run around Bill Gates and all those other visionaries struggling to make cyberspace the next giant shopping mall.

Well, no one is saying that's what Divx is, but according to Tom Shaeffer, the consultant who designed the basic architecture for it, Divx does have the potential to dramatically change our lives. "The real breakthrough provided by this system is the development of a de facto transaction information standard," he says bluntly. "This could become for the information age what Microsoft was to the computer age."

As Shaeffer sees it, the technology has applications far beyond the DVD movies he calls "the tip of the

iceberg." Divx contains a closed-loop transactional system that could provide an incredibly secure and inexpensive path for many types of consumer and business purchases, and which can be used to unlock any type of digital data you care to encrypt. Let's say you have a Divx-based disk drive in your PC.

"Microsoft comes out with Office 98, and I'm not sure I want it," Shaeffer says. "If it's encrypted, I can pay to use it for a few days. When I finish renting it, I can then decide if I want to rent it again or purchase it outright."

Or, for example, "Imagine that instead of receiving a magazine in the mail each month, you get a DVD-ROM," he continues. You would just pop it into your Divx-based magazine reader (possibly combined with your movie player), and "you can get the same information and do your shopping, as well." To order something, you'll just hit a button on your player's remote and the central computer will deduct it from your credit card account.

Introducing a sea-change technology like this to the public, Shaeffer suggests, is something that has to be managed carefully. "Technology moves very fast," he says, "but consumers change their habits very slowly. So if you want to introduce a revolution, you announce an evolution. Right now, DVD is the hot concept."

Our electronics-age society has been moving in this direction for some time, Shaeffer stresses. Anyone who logs on to the Internet and communicates with a distant computer surrenders some privacy. And any computer, Shaeffer suggests, can develop a profile of your habits over time, your likes and dislikes. But while that holds out the danger of your profile being sold or misused, it also opens a world of convenience and new possibilities.

In any event, society inevitably marches on and adjusts to whatever the new paradigm happens to be, whether we like it or not. "Divx didn't invent invasion of privacy," Shaeffer concludes. "It's been here since the beginning of time," with each generation sacrificing more and more privacy as technology advances. "Philosophically, it's a nonissue," he says. "It's just something the evolution of mankind brings along with it."

DVE's Paul Brindze, incidentally, acknowledges that the company is exploring future applications for Divx technology, but says there's "nothing that's on the fast track right now." ☞