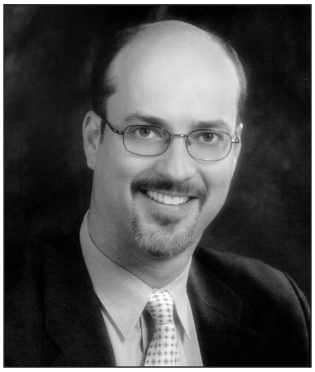
The Business of Digital Cinema—The Exhibitors' Perspective

By John Fithian

This paper has two objectives: to emphasize the importance of technical standards for digital cinema and to describe a set of other issues that must be addressed before distributors and exhibitors can begin a serious roll-out of the new digital cinema technology. Regarding the former, the National Association of Theatre Owners (NATO) strongly endorses the standards-setting efforts of SMPTE, and this paper offers suggestions for continued SMPTE progress in the context of multiple standards-setting organizations. As for the second objective—analyzing pending issues other than standards—exhibitors and distributors must address costs, control, quality, security, alternative product, participation, and legal issues before the transition can occur. The paper concludes on a note of optimism that industry leaders will find a way to address these difficult issues so that a careful transition to digital cinema will occur.



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For motion picture studios, movie theater operators, and their patrons, digital cinema may become the most important technological transition since the advent of sound. Indeed, our industry has operated with the same basic technology for decades. Digital cinema could revolutionize the business by transforming the nature of production, delivery, and exhibition; by saving distributors hundreds of millions of dollars annually; and by making it easier for exhibitors to offer alternative content.

None of this will come easily, however. Significant issues and challenges confront the potential transition. No one knows for sure which technology will prevail, when the transition will occur, or how it will be financed. Nonetheless, the transition will come.

I represent the National Association of Theatre Owners (NATO), an organization of 700 members actively involved in all aspects of the digital cinema debate. These members participate in every facet of SMPTE's DC-28 group, which NATO wholeheartedly endorses, and serve on the Ad Hoc Group on D-Cinema of the Steering Committee of the International Telecommunications Union's ITU-R Study Group 6. NATO has also helped form the Digital Cinema Lab at the University of Southern California's Entertainment Technology Center.

In addition to participating in those organizations, NATO has two internal working groups that study the issues and chart our priorities. One group focuses on the technological issues, while the other is concerned with business.

The Importance of Technical Standards for D-Cinema

For the business of digital cinema to take place, the industry needs open, uniform standards that promote worldwide compatibility and interoperability, as well as advance competition. In the past year I have traveled to meet with exhibition leaders from Japan, Europe, Australia, and North America and can report that they are united behind the cause of global standards for the new technology.

A digital cinema system will involve many components built by different manufacturers and will have to support different content from different providers. Open, global, uniform standards must be developed to prevent the need for multiple systems or duplicate components in the same theater complex. We cannot repeat the mistakes made during the implementation of digital sound, where different systems were necessary to play different product. Standards will promote compatibility and interoperability.

Standards are also necessary to promote competition. Competition is necessary to avoid monopoly pricing in equipment manufacturing or in digital product delivery. Theater operators will not agree to a situation where all of the product comes through one satellite provider or one broadband pipe, nor a system where any one manufacturer or technology has monopoly control.

From early 2000 to the present, SMPTE has made significant progress

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through the efforts of its study groups, and working groups are being formed to move to the next stage in the standards-setting process. NATO strongly endorses this process, but I am concerned that multiple standards-setting organizations may produce inconsistent results, defeating the purpose of the effort in the first place. SMPTE, the Motion Picture Experts Group (MPEG), the International Telecommunications Union (ITU), and other organizations must find ways to coordinate their efforts, share information, divide responsibilities, and produce consistent results.

To further the goal of coordination, I encourage SMPTE to move forward with all deliberate speed in its working group process. The faster progress is made, the easier it will be for other standards organizations to adopt SMPTE's work in their own activities and to produce consistent results. I am glad to note that SMPTE and the ITU have document-sharing agreements and are beginning to coordinate their respective responsibilities. These efforts are essential. I encourage the DC-28 group to publish its progress as often and quickly as possible, so that the world will know what I know—that SMPTE has accomplished a great deal in the area of D-Cinema.

Other Important Issues

Beyond the issue of technical standards, there are many important questions that must be answered before a full-scale rollout of digital cinema will make sense as a business proposition.

D-Cinema and the Exhibitors

In the current environment, for about $30,000, a theater operator can equip a projection booth with a new 35mm film projection unit that will last for many years, even decades. Digital projection units currently cost several hundred thousand dollars. The best estimate of cost once rollout begins seems to be about $100,000 at the least. And how long will this equipment last before upgrades are necessary? Two years?

It's very simple math. If anyone expects theater owners to pay for the transition, they simply don't understand the math: $30,000 over twenty years or $100,000 over two. Digital cinema could never drive enough extra traffic through box offices and to concession stands to make up the difference.

Some say that equipment costs will come down as the rollout takes place, just as personal computers or cellular telephones became vastly less expensive over time. Those observers haven't examined the numbers. For a product's cost to decline, there must be economies of scale. Hundreds of millions of consumers worldwide own computers or cell phones. In our industry, there are approximately 36,000 movie screens in the U.S. and roughly 120,000 total worldwide. Those numbers do not produce sufficient economies of scale to drive down costs.

There are potential cost savings for exhibitors. A fully implemented digital regime may require fewer staff and less real estate. Those savings will take years to materialize, however. In the short term, the implementation will actually cost more in staff time and real estate. We will have to train employees and position digital projection units next to traditional equipment. Only when all product is available in digital format and all theater staff understand the new technologies, will savings occur.

Finally, the present economic challenges facing the exhibition industry exacerbate these cost concerns. Twelve major exhibition companies in the U.S. have filed for bankruptcy and others have faced serious fiscal strains. Fortunately, our industry's economy is improving: box office receipts are up 10% over 2000, while admissions are up 5% (as of late September). Equally important, screen count is coming back down to less than 36,000 domestically from its high of nearly 38,000. Yet exhibition has a way to go before a return to the days of strong bottom lines.

D-Cinema and the Distributors

Motion picture distribution companies currently spend $1,500 to $3,000 producing a single print of a movie. First-run, wide-release pictures need several thousand prints. Once a digital system is in place, costs likely would not exceed several hundred dollars, if that, to distribute a movie. Simply put, the studios stand to save more than $800 million annually, just in distribution costs. Additional savings will occur in the synergies of producing, editing, and distributing a film in all-digital format.

Control of the System and the Data

Currently, distributors ship films to exhibitors in metal canisters. From that point on, as long as they comply with their contractual obligations, theater operators control the show. Exhibitors assemble their show elements and determine screen times. They know and interact with their customers; in other words, movie theater operators operate their business.

In a digital world, data controls; and he who has the digital keys controls the digital data. Theater owners do not want to be reduced to little more than brick-and-mortar businesses that build new complexes, which the studios then operate remotely.

Enhancing the Movie-going Experience

Digital cinema is being tested in many locations around the world. Side-by-side demonstrations have been conducted with digital projection next to film. Cinematographers, directors, studio executives, theater operators, and patrons debate the quality of the experience. The technology is improving rapidly, but the jury is still out.

I've heard some commentators say that digital projection is just as good as film. That isn't enough. Why change to an expensive, unproven technology to get an experience that is "just as good" as we have now? Digital cinema must be better than film, and I believe it can be.

Celluloid prints deteriorate over time. As the film runs through projectors over and over, and as the print gets shipped from one exhibitor to the next, the quality of the presentation wanes. Digital cinema will not experience the same effect. But the bottom line for exhibition is this: digital cinema must be better than film or there is little incentive to begin the transition.

Security

Without sophisticated encryption technologies, digital cinema could enable pirates to steal first-run movies for home viewing at the very onset of the theatrical release. Secure transmission must be a priority.

New Business Opportunities for Exhibitors

Movie houses need not be just movie houses. From 1990 through 2000, domestic screen count grew dramatically. The number of movies, however, did not expand at the same rate. Indeed, in the past several years, production has declined.

Granted, there are too many screens in this country and the exhibition industry is suffering as a result. But even as our industry is now reducing screen count, we could still use new product. Digital cinema technologies would make it easier for our members to show musical concerts, sporting events, fine arts entertainment, business theater, religious events, and even educational programming. Motion pictures will always be our biggest business, but digital cinema may open new doors to essential new revenue streams.

Involving All Potential Participants

I represent more than 700 members. They range from large international circuits to one-screen operators in small towns. The digital experience must be open to all potential participants. Some say that digital cinema will wipe out small-theater operators, who are often overlooked by the distributors and may not get the print they need on the first-run break. I disagree.

With digital cinema, the expense of producing a print and shipping it across the country or the world will be virtually eliminated. I believe digital cinema might make it easier for those small-theater operators to provide service to their customers. Digital cinema can be good for competition and good for the patrons, but only if managed correctly.

Necessary Planning

Digital cinema should not be implemented as a private deal between select parties seeking quick advantage over their competitors. In the end, they will find that the advantages were ephemeral. In fact, the first companies to introduce digital may find that they have implemented an unproven, costly technology that quickly becomes obsolete or for which upgrades prove difficult.

Instead, digital cinema should be implemented pursuant to an industry-wide plan. The planning process should involve all distributors and all exhibitors. And the planning needs to take place on two tracks: technical and business. That's why NATO formed two task forces whereby our membership can have input with selected representatives who will carry exhibition's concerns and goals into the discussions. On the technical side, this construct has borne fruit. The SMPTE process is very useful and must continue.

On the business side, however, very little industry-wide planning has taken place. Distribution companies have had extensive internal discussions, as have exhibition companies; but distribution and exhibition must come together soon. NATO members are prepared to undertake this planning immediately. Business planning and standards development can occur simultaneously. There is no reason to wait for the ultimate conclusion of the standard-setting process before any business plans are made.

Legal Concerns and Industry-wide Planning

I do not believe that the antitrust laws prevent us from engaging in comprehensive planning. We have closely examined this issue and are confident that pro-consumer, pro-competition industry plans, which comport with all legal standards, can be approved and achieved in a timely fashion. Some matters must be addressed in the context of individual business deals; but the structure and plans can and must be developed as an industry, in the interest of fair competition and consumer protection.

Conclusion

Digital cinema technology is promising, but the issues involved are serious. I believe that coordinated standards efforts will bear fruit. I believe that distribution and exhibition will come together and solve the business issues. I believe that the technology will continue to improve and that the consumer will be afforded a better product in the end. But we must have patience and good judgment as we contemplate a methodical transition to a new era in cinema-going.

THE AUTHOR

John Fithian has been president of NATO since January 2000. Recognizing the rapid globalization of the exhibition industry, he has worked to improve coordination and communication between domestic theater owners and international cinema operators. He has helped guide theater owners through the recent challenges facing the exhibition industry, including technological developments, goverment oversight of the movie-rating system, and relationships with the creative, production, and distribution communities. Fithian serves as the chief public spokesperson for theater owners before public officials and the press.