Digital cinema is wowing theater owners, movie fans

by Jonathan Sidener

Irish rockers U2 created a buzz at the recent Cannes Film Festival with a 55-minute preview of a high-tech concert movie, "U2 3D." By pushing the technical limits of 3-D digital cinema, the film will showcase the strengths and weaknesses of cinema made without celluloid.

Producers plan to limit release of the final 90-minute version to theaters equipped with digital, 3-D projectors. Unlike animated 3-D movies such as "Chicken Little" and "Monster House," "U2 3D" will show off the format's potential for live-action special effects.

A Reuters reporter at Cannes wrote that when U2 lead singer Bono reached toward the 3-D camera, it looked as if he were about to step off the screen into the theater.

UNREEL FUTURE - Jake Zamzow, 19, head projectionist at Ultra Star Cinemas in San Diego, prepares to run a digital version of the latest 'Pirates of the Caribbean' film. CNS Photo by Nadia Borowski Scott.

The turbocharged music video will do more than demonstrate the technical prowess of digital cinema. It will introduce many consumers to a type of entertainment the industry calls ODS, or "other digital stuff." The category includes anything other than movies - for example, sports or music - that might draw paying customers into a theater.

In recent months, two ODS projects have captured media attention.

On New Year's Eve, New York's Metropolitan Opera broadcast the first of a series of live, high-definition performances, sending Mozart's "The Magic Flute" to theaters in several cities.

In February, the NBA's All-Star Game in Las Vegas featured the first sports event broadcast in live, high-definition 3-D. The game was sent over a high-speed network to two theaters at the Mandalay Bay hotel-casino.

"U2 3D," which doesn't have a release date, will also underscore the downside of Hollywood's transition to digital: its glacial speed.

Only about 1,000 theaters worldwide are capable of screening a digital 3-D movie today, according to industry estimates. There are more theaters capable of showing digital 2-D movies, but digital theaters are still a small percentage of theaters in this country and worldwide.

It's been nearly nine years since October 1998, when the industry released its first digital movie to theaters: the obscure "The Last Broadcast."

Industry consortium Digital Cinema Initiatives is only now finalizing the digital-cinema standard and certification process intended to ensure that studios, distribution companies and hardware manufacturers have a common digital game plan.

Despite the slow transition, digital cinema has many fans. Proponents say it improves the moviegoing experience, whether it's a 3-D basketball game or "Rocky 17."

Traditional film is prone to slight movements, up and down and left and right, as mechanical sprockets speed individual frames past the projector bulb. Dust and other objects leave scratches and dings on images after repeated showings.

Digital movies aren't subject to jittery movements and don't degrade, no matter how many times they're projected onto the big screen.

Digital cinema is expected to simplify theater operations. To show a traditional film movie on six screens, a theater owner would need six copies of the film. But one digital copy could run on all six screens.

Digital-cinema proponents include Ultra Star Cinemas, which has digital projectors in all 102 of its theaters and side-by-side film projectors pointed at some of those screens.

The Southern California movie chain says digital films are far better, so it uses only its film projectors when a movie isn't released in digital.

"Why would we offer our customers chuck steak when we have filet mignon?" said Damon Rubio, Ultra Star operations vice president.

In recent months, roughly 90 percent of movies have been released in digital.

"Every summer blockbuster will be released in digital," Rubio said. "About the only time we use the film projectors is around the Oscars. The art films from smaller studios are not always released in digital."

While the digital transition has crawled through the past nine years, there are signs that things are picking up.

At the beginning of the year, there were about 2,500 digital theaters in the United States, said Andrew Stucker, director of Sony's digital-cinema division. By the end of the year, that number should double.

"Still, with about 39,000 theaters in the U.S., that's a small percentage," Stucker said.

A number of forces will speed the transition, including 3-D, he said. With digital, it's easier to shoot and display 3-D movies, he added. And moviegoers are embracing 3-D movies.
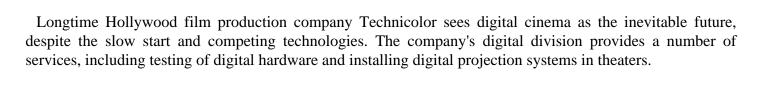
"Movies shown in 3-D are bringing in from 30 to 50 percent higher box-office revenues," Stucker said. "In 2007 and 2008, something like 18 major movies will be released in 3-D."

Although film technology stays much the same year after year, digital technology continues to evolve. While some companies push a version of digital cinema roughly equivalent to today's HDTV, Sony and others are backing a technology known as 4K - four times the resolution of HDTV.

Capitalizing on the popularity of 3-D and the current interest in the latest "Spider-Man" sequel, Sony remastered the movie in 4K and showed it in 3-D in a handful of theaters around the world in May.

Stucker said films using the 4K technology will rival the visual appeal of such movies as "Lawrence of Arabia," which was shot on 70 mm film, instead of the more economical 35 mm used today.

"We should see the first film shot in 4K within 12 to 18 months, max," he said.

Longtime Hollywood film production company Technicolor sees digital cinema as the inevitable future, despite the slow start and competing technologies. The company's digital division provides a number of services, including testing of digital hardware and installing digital projection systems in theaters.

With the expectation of major cost-cutting and the potential to lure customers back into the seats with 3-D and alternative content, "it's mostly a question of when," said Curt Behlmer, chief operating officer of Technicolor Digital Cinema.

With industry standards nearly complete, Behlmer sees 2008 as the year digital cinema takes off.

"Right now, nobody's making any money from digital cinema," he said. "The studios still have to print a lot of film, along with the cost of producing digital versions. The exhibitors aren't making anything extra from digital.

"But when you put digital side by side with film, everyone agrees it's the future. Right now, everybody is investing in that future."

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