

Technology

Death of the format wars

And fear not – the price of holographic discs has to go down

By Joseph Wilson

The war over high-definition DVD formats is finally over. The beleaguered HD-DVD format marketed by Toshiba was put to rest last month when Warner Brothers, the last large HD supporter, moved to support the more popular Blu-ray disc.

As in the Betamax/VHS battle of the 1980s, movie studios gambled by backing a particular format but were quick to jump ship when it looked like they were on the losing side. Exhausted consumers, anxious over whether they're stocking their DVD collections with the right format, finally know that Blu-ray is here to stay – although it seems the next format war is lurking just around the corner.

The holographic DVD discs about to hit the market are designed to hold more than 160 times as much data as Blu-ray DVDs. Measuring 13 cm in diameter, slightly larger than a regular DVD, they require a player costing up to \$18,000, but researchers are confident prices will drop in years to come.

Blu-ray and HD-DVD formats squeeze extra space out of a regular-sized DVD by using a blue laser, which has a smaller wavelength than the more common red kind. Holographic DVDs use a combination of green and red lasers that shift positions, reading data off the DVD in three dimensions, much the way different vantage points yield different images when viewing a holo-gram.

As you'd expect, two leading holographic DVD formats, manufactured by rival companies InPhase and DCE Aprilis, are competing for dominance. While there are slight technical differences between their DVDs, the underlying principle is the same. The real difference between them, as was the case with Blu-ray and HD, lies in market share and who manages to build a more powerful coalition of partners.

InPhase Technologies is squarely focused on the consumer market, bent on replacing the world's Blu-ray DVDs with the new holographic kind. The company was set up by Lucent Technologies in 2000, based on research conducted at the famous Bell Labs. The company currently works closely with Hewlett-Packard, Hitachi-Maxell and Panasonic to develop products, a coalition that will grow in the next few years in order to intimidate the competition into folding.

DCE Aprilis was founded by some engineers at Polaroid in 1999 but is currently controlled by electronics giant Dow Corning, a subsidiary of Dow Chemical. The company has powerful friends and will have no trouble matching the roster of partners cultivated by InPhase.

Industry reports say DCE is trying to corner the market of companies and government agencies that need huge amounts of storage space, which isn't a surprise, based on Dow's connections to high-level authorities in both the public and private sphere. However, the consumer market for this technology is far too lucrative to ignore for long. You can bet DCE will soon be announcing a consumer market division, or at least licensing its technology to a development company.

For now, no one is clamouring to put a \$180 holographic DVD or an \$18,000 player on their shelf. But the technology business is a lucrative one and moves, in this case quite literally, at the speed of light. Outfits like InPhase and Aprilis must build strong alliances or risk being consigned to the growing list of failed companies.

tech@nowtoronto.com

