

Trendy but Costly: Why 3DTV Might Not Be Such a Sure Bet

By Melissa Smith

For almost two years, 3DTV has been marketed as the next big thing. Because consumers are spending money in theaters for 3D movies—The Lion King 3D made more than \$30 million in its opening weekend alone—developers are pushing to bring the 3D experience into the home through television. But the transition to 3D might not be such a sure bet.

There's certainly more 3D content than ever being produced for television. ESPN plans, starting this month, to shoot 43 NCAA basketball games in 3D. The World Cup is broadcast in 3D. But is having a few, albeit high profile, programs available in 3D enough to get customers to buy expensive sets? And with increased adoption of Anywhere TV and quadruple-screen services, the trend seems to be moving away from viewers sitting around a set in the living room, which 3D requires. And those glasses aren't exactly a fashion statement.

If you are thinking about offering 3DTV programming, it might be smart to wait it out a bit longer. Here's why:

Bandwidth

Right now, HD channels are in demand—the consumer actually wants this, so why lose up to 6MHz of bandwidth to provide programming that only a limited number of subscribers can enjoy? Depending on the encoding method used, a single 3D channel could use up to two channels that could be put to better use providing HD content.

For providers with bandwidth to spare, this isn't really an issue—but for smaller providers with more constrained bandwidth availability, there isn't much to spare for something that may or may not be around in five years.

Standards

The kinks are still being worked out of 3DTV standards, so until they are set, there is no guarantee that all 3D programming will work with all technologies.

Telecom tech guru Tal Givoly wrote in his blog about why he thinks 3D technology will not catch on as planned:



"It's great that HDMI 1.4a is there, but that isn't enough," Givoly says. "There are still several different ways to broadcast 3D signals. Mind you, none of them are full HD (or even 1080i) for each eye. How the signal is packaged has impact on quality."

Givoly goes on to say that all 3D technology from the TV to the receiver to the DVD player and everything else can be affected by these conflicting standards, and may not work correctly, or at all. Also, currently, there are no standards for 3D glasses, though Panasonic, Samsung, Sony and X6D Limited have joined forces to devise a standard for glasses. These glasses will reportedly be available in 2012, and will be compatible with 2011 3D active TVs, according to a press release.

In April 2009, The Society of Motion Picture and Television Engineers (SMPTE) suggested a mastering standard based on 1920 X 1080 pixel resolution at 60 frames per second and per eye, but there are other standards bodies like the Consumer Electronics Association (CEA) and 3D@Home working to create their own standards for 3D technology.

Technology

Leslie Ellis, analyst, expert and author of her own telecom tech blog shared her thoughts on the expense of producing 3D television programming. 3D cameras are still expensive and Ellis adds that converting existing content, if done correctly, can cost up to \$125,000 per minute, and doing it wrong can produce a dizzying, sub par viewing experience.

Expensive for Consumers

In 2009, millions of Americans bought new televisions because of the Digital TV transition and Americans aren't likely to be ready to invest in new sets anytime soon.

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SNL Kagan reports that only about 1.8 million homes in the United States, or only about 2 percent, are expected to own a 3DTV by the end of 2011. While these numbers are expected to grow with an expected penetration rate of 21 percent by 2015, right now, they seem stalled.

3D televisions are expensive, running from about \$400 for a refurbished set to around \$8,000 for a brand new set, not to mention the cost of fitting an entire family with 3D glasses, which, depending on the type of glasses, could cost up to \$180 for one pair.

Still, in both the United States and in Europe,

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Content Availability

It seems everyone is jumping on the 3DTV bandwagon, from AT&T to Virgin Media, to just about everyone in between. And it seems, for at least some customers, are jumping on the bandwagon too. DirecTV leads with four channels devoted to 3D programming, with other providers investing more in 3D video on demand. There are roughly 31 channels worldwide today offering 3D programming, seven of which are available in the U.S. However, the recent break-up of AT&T and ESPN 3D based on lack of sustainable demand might be an indication that 3D is a nice-to-have and not a must-buy service.

Still, ESPN3D is still a selling point for DirecTV, and Comcast ESPN3D has been beamed into a reported 60 million households. They recently announced 43 college basketball games will be produced in 3D, including the first ever women's basketball game in 3D.

In November, Orange TV is launching a monthly, 26-minute long program, shot in 3D, in an attempt to inform, educate and entertain the viewers about 3D technology, according to a press release.

Still, for the amount of money it costs to invest in 3D technology, there is little content available in comparison with HD and regular programming. The catch is that providers are waiting to produce more 3D content until they are certain it will take off, and consumers are waiting to buy 3DTVs until more content is available. It's a stalemate, and until more content is produced, consumers will more likely invest in a standard HD television.

The Future

In "3DTV Market and Future Forecast Worldwide (2010-2014)," Research and Market reports that the US 3DTV market is expected to reach \$25 billion by 2015, but the technology is still in its infancy, and efforts at reducing cost, and providing more content and standardization are at the heart of whether or not this will be the next HD, or just another passing fad.

Bottom Line

3DTV right now is a novelty, a niche market to provide the sports entertainment of a lifetime or theatre quality movies at home, with few other choices. It's something new, it's something exciting, but it's also something consumers aren't so sure they want yet.

With the influx of 3D products coming out, the temptation to invest in 3DTV technology might be strong, but right now it's neither cost efficient nor

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smart to invest in something that might die out before it's even started.

Still, developers are pushing new 3D products as the next big thing, but only time will tell if it will actually take off. For the risk-adverse, it might be wiser to wait to see where the bandwagon is exactly going before hopping on.