



DVD, DVR and VOD: Three Sexy New Acronyms Spell TV's Future

By Jimmy Schaeffler ■ *The Carmel Group*

It's getting to be a good time – in fact, a better and better time -- to be watching TV.

What was once three-to-five fuzzy, analog broadcast channels in semi-rural Reno, NV, where I grew up as a child, is now 300 or so digital, perfect quality channels from DirecTV or EchoStar. In addition, my cable company delivers a few score analog, mixed with scores more digital, signals on its "digital tier," for about the same \$30-\$40/month, as do the satellite guys. Plus, pretty soon DirecTV will catch up to EchoStar and offer all of my local channels here in Carmel-by-the-Sea, CA, for a mere \$5.99/month. It just keeps getting better and better, all the time.

Beyond these basic packages, however, is the real meat of TV's and my viewing future. These are highlighted in several forms of advanced services, seen in the acronyms DVD, DVR and VOD, each of which is beginning to take hold. These will take my TV viewing – and that of most of the other 250 million or so U.S. TV viewers – to an entire new level. Most important, these three devices do exactly what they should do to entirely revamp and improve my viewing experience: Each of them provide a new level of affordable choice and control.

DVDs Are First

The Digital Video (or Versatile) Disk (DVD) is out front in the race between these three combinations of devices and services for the hearts, souls, eyeballs and pocketbooks of America's viewing public. The goal of global DVD makers today is to replace the 500 million worldwide VCRs with a digital-quality picture, also featuring extras such as director's interviews, special omitted scenes, and many more features not offered by the typical VCR tape. DVDs are essentially four-inch

wide laser records that provide perfect-quality picture, often better than real life, for mere dollars per disk. Plus, DVD-only devices are selling for well below \$100 these days, making their consumer accessibility rating extremely high.

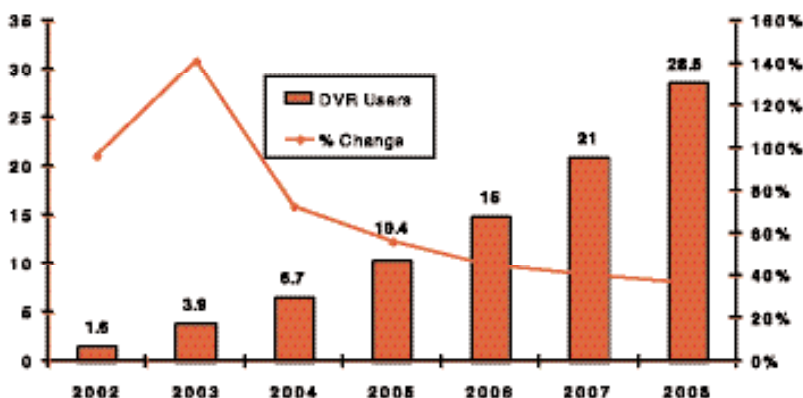
Following the DVD wave is the DVD-R, which stands for "recordable" disk, which will make perfect, digital quality copies of most consumer content, for distribution around the world. Thus far, pricing and serious questions concerning Digital Rights Management (DRM) and copyright are hindering the rapid growth of the DVD-R medium. Nonetheless, the ability of the DVD-R to assist in the archival and recording of better quality content will be a strong force behind its success and growth. Further, there is little question that the DVD-R takes the average viewer way further down the road to "choice and control," especially once the price of the DVD-R box drops to the first "magic threshold," i.e., \$299, and then to the next magic threshold," at \$199 (See, chart, below).

DVR's Next

Digital Video Recorders (DVRs) are also known by some in the industry as "Personal Video Recorders" (PVRs). A DVR pauses, records and rewinds real time, "live" video signals, giving viewers more and more control and choice over their viewing habits. These devices are becoming less and less standalone units, and more and more part of the satellite set-tops distributed by DirecTV and EchoStar, as well as those distributed by a handful of forward-looking cable companies.

With several million of these DVR units in the market place today -- mostly in the hands of satellite subscribers -- many are expecting DVRs to proliferate to the point where almost 30 mil. DVR units will be consumer-owned by year-end 2008. Here too, prices will decline markedly as unit manufacturing goes from hundreds of thousands to millions, and this, in turn, will do a great deal to make the DVR a mass consumer electronics market champion.

U.S. DVR User Projections



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VOD

Video-On-Demand (VOD) comes in one main flavor today, as well as in one related flavor that focuses primarily on the DirecTV side of the satellite business. DirecTV's version, executed with partner StarzEncore, offers what is called Subscription VOD (SVOD). VOD typically is delivered only through a cable provider, because of the necessity for a strong, active return signal that creates a two-way path between the cable head-end and the consumer. SVOD involves five or so weekly StarzEncore movies being downloaded at night by DirecTV to consumer's set-top box, for about \$5 extra per month.

The key differentiation between VOD and DVRs is seen in the storage formats. DVRs store in the user's set-top box, and only there. VOD stores primarily in the cable head-end, although a few systems are looking at possible storage also in the cable set-top box. Key challenges for VOD today include obtaining sufficient content for delivery to the consumer and costs for

the VOD infrastructure.

Especially interesting in this regard are a handful of cable operators – such as Charter in St. Louis, MO -- that are building VOD head-end systems with DVRs built into consumers' set-top boxes. This we see as the true path for deployment of these devices, perhaps even one-day with a DVD installed, as well.

Perhaps no better playing field for future convergence exists than that where these three stars – DVD, DVR and VOD – are starting their careers. For this future, cable has the inside track, likely to last for at least another five-to-ten years, until satellite has been able to test and deploy a viable two-way infrastructure, balanced around high-power Ka-Band satellites and their infrastructure.

In Sum

Driven by these three industry subsectors, TV in the 2010 timeframe will clearly involve a vast array of enhanced opportunities to learn, to be informed, and to be entertained. Plus, when average con-

sumers can access via the same cable, satellite and other infrastructures, the two other major forms of content – voice and broadband – it's hard to imagine people ever wanting to leave their homes (God forbid!). ■

About the Author

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