What Now for Audience-Measurement Techniques?

Nielsen chief spotlights challenges of the digital revolution that enable viewers to watch in their own time. | **By Susan Whiting**

The autumn of 2005 may well be remembered as television's tipping point. A parade of media deals between Labor Day and Christmas confirmed that change in the industry is not only inevitable, but accelerating.

Apple's agreement with ABC, and subsequently NBC, to deliver several of their programs via the iPod drew the most headlines. Yet, within a span of just a few weeks, there were a series of groundbreaking handshakes between conventional and new media companies.

For example, NBC Universal announced it was hooking up with Wurld Media to make its movie and television content available over legitimate peer-to-peer services. The network also partnered with Time Warner Cable to allow cable customers to use Time Warner's "Start Over" service to rewind and watch its shows already in progress. And TiVo planned to let users transfer any recorded program, not just to iPods, but also to Sony's PlayStation Portable.

The TV neighborhood is bound to get even more disruptive as digital technologies dismantle the walls that have historically separated media.

If, as the poet Robert Frost once counseled, "good fences make good neighbors," the TV neighborhood is bound to get even more disruptive as digital technologies dismantle the walls that have historically separated media. The ability to convert all forms of information into seemingly endless streams of ones and zeroes is enabling a host of media companies to fiercely

The author, Susan Whiting, president and CEO of Nielsen Media Research.

compete for audience attention and advertiser dollars.

The implications of all of this are enormous. Can networks afford to fund high-quality programs if they no longer attract mass audiences? Will advertisers find new ways to connect with consumers at every possible touch point, ensuring their messages are seen and heard no matter how media are used?

The answers to these and a great many other questions depend – in large part – on how well ratings agencies like Nielsen Media Research can accurately measure all forms of television viewing so that a true value can be given to the audiences delivered.

Along with our sister companies at VNU–AC Nielsen, Nielsen Entertainment and Nielsen/NetRatings – Nielsen Media Research measures audience attitudes and advertising exposure to television, radio, music, the Internet, video games, DVDs, DVRs, Video on Demand, iPods, outdoor, movies in the theater and rented on video, book sales, direct mail and brands that appear in places like sports stadiums and arenas.

In other words, if audiences can watch it, listen to it, read, see or interact with it, we measure their activities.

Change has always been a part of our DNA at Nielsen; and while we have continually enhanced the ways we collect, process and report ratings data for more than a half-a-century, perhaps the most dramatic improvements to our systems can be found, not in the last 50 years, but over the past three.

During this time, Americans have been awash with media.

According to a study by Nielsen Entertainment, the average home currently has nearly 100 television channels from which to choose. Not only do 80 percent of these households subscribe to multi-channel program sources like cable or satellite TV, but the number subscribing to both has more than doubled over the past seven years.

In addition, some 86 percent of households have more than one TV set; while about 44 percent have at least three.

This explosion of media has been abetted by the unmistakable arrival of broadband. Last year marked the first time more American households accessed the Internet via high-speed, broadband than with slower dial-up connections.

The ability of broadband to support multiple systems simultaneously, and its capacity to adapt to different applications, has opened the media floodgates.

Telecommunication firms SBC and Verizon, for example, are spending billions of dollars to build fiber-optic networks that will deliver on-demand and high-definition programs directly to the home. Hardware manufacturers such as Sony, and software giants like Microsoft, plan to provide the devices and applications that will enable audiences to enjoy TV and other media through single, integrated systems. Plus Internet pioneers are following the lead of Yahoo! CEO Terry Semel, who has vowed to make Yahoo! a media company that will produce and distribute content in entirely new ways.

Wave after wave of new competitors is having considerable impact on television viewing.

When I first started at Nielsen in 1978, it was common for the whole family to get together in front of one TV to watch their favorite shows – from start to finish. Entire prime-time schedules were built on the assumption that once the set was tuned to a particular channel, it probably would stay there all night.

Now, with most homes having multiple TV sets, it's rare for more than a couple of family members to watch a program together. It's even more unlikely they will watch an entire show without flipping to other channels. As a result, few programs regularly attract the percentage of audiences their predecessors once did.

Back in 1978, the most popular show on TV was *Laverne & Shirley,* with a 31.6 household rating. By 2004, however, the number one program, *American Idol,* had a 14.9 rating. In fact, all of the top 20 shows in 1978 had higher ratings than *American Idol.*

If it were just a matter of vying with competitors, the challenges to television would be formidable enough. But, at times, the medium finds itself at odds with its audiences as well; particularly younger viewers.

They are the first generation to grow up digital, and are often more technologically sophisticated than older viewers. Research by Nielsen Entertainment has found that households with children under the age of 17 are more likely to be early and multiple-technology adopters.

The ability of broadband to support multiple systems simultaneously... has opened the media floodgates.

Moreover, this new generation is just beginning to flex its technological and economic muscles. As their elders wrestle with the implications of transforming all forms of text, sounds and images into ones and zeroes, many more young people are at ease with the process.

They have an almost instinctive ability to take different objects and combine them in entirely new ways, like unbundling linear TV schedules with digital video recorders and Video-on-Demand services. And they have fully embraced the notion of having their TV wherever they go.

Increasing competition and more empowered consumers are recasting television, and no one can say for certain how and where it may end up. But one thing we at Nielsen do know for sure is that neither we nor the industry have the luxury of waiting around for answers. Because any medium that is under-measured is under-valued.

Accordingly, Nielsen has been developing the means to measure continually changing viewer behavior in an ever-expanding digital environment; tracking audiences wherever they happen to be and on whatever devices they are using, whether it is a television set, iPod, cell phone or other mobile devices.

Over the course of more than a decade, and at a cost of hundreds of millions of dollars, we have been exploring and testing a vast array of methods and technologies: set meters and portable meters; software systems and platforms; wireless and infrared; passive and active; measurements that can be mailed or sent via the Internet and measurements that must be installed; measurement devices that deliver enormous amounts of detail, and those that deliver much less.

In the process, we have transformed our ratings systems from a model designed to gauge household fixed media to a click-stream system that tracks individual use and media exposure.

The initial result has been a new metering system we call the Active/Passive (A/P) meter, which will serve as the cornerstone for measuring time-shifted viewing activity.

The A/P meter is the only complete multi-engine metering system that actively tracks audio codes embedded in content, and also reads backup passive audio signatures to ensure all programs and viewing sources are accurately rated.

Once a program's content is encoded, we can track it wherever it goes, and determine what program a viewer is watching, as well as what network, station or distributor is serving up the program. Presently, between 80 and 90 percent of national content is encoded. At the local level, more than half of all content in the major Local People Meter markets also is encoded.

This enables Nielsen to measure a broad range of analog, digital, broadband and high-definition video, including time-shifting devices now and standard Video on Demand in the near future. Before the end of this year, we also will be able to offer ratings for on-demand programs that are not part of regular programming, such as movie libraries and archives of old shows – provided the content is encoded.

We often find that technology demands are dwarfed by the challenges we face getting our various clients to agree on anything having to do with audience measurements.

Furthermore, an advanced generation of portable software engineering, now under development, can measure consumers' remote access to video via a computer or cell phone.

To further enhance our ability to keep track of audiences on the go, we also are working with Arbitron to learn if Portable People Meter technology is suitable for television-audience measurement. The PPM is a small device that is worn or carried like a pager and, in theory, can record what consumers watch on television no matter where they happen to be.

We recognize the potential of a metering system that can effectively estimate how much TV exposure happens outside the home. However, there is still more work to be done before the system proves viable.

These initiatives are just some in a series of ongoing innovations to improve the quality of television ratings. Yet we often find that technology demands are dwarfed by the challenges we face in getting our various clients to agree on anything having to do with audience measurements.

We spend much of our time trying to negotiate a path for change among advertisers, their agencies, broadcast and cable networks, local television stations and syndicators – all with competing, and sometimes conflicting interests. Our decision to measure time-shifted viewing is a perfect example.
Last year, we decided to report the ratings data based on three streams of viewing:

1) Live – Those who view programs at the time they initially are aired, excluding any DVR playback.

2) Live+SD – Live viewers and those who played back programs on a DVR within one day of the initial airing.

3) Live+7 – Live viewers and those who played back programs on a DVR within a week of the initial airing.

The mere mention of time-shifted ratings raises strong feelings on both sides of the buy-sell equation. But this issue, like so many others, will ultimately be settled by a combination of forces, including the influence of consumers.

To be sure, no matter how much television changes, viewers will play an increasingly important role; and they remain loyal to the medium.

According to our research, TV viewing was 2.7 percent higher last season than the season before. It also was 12.5 percent higher than 10 years ago; and the highest level ever recorded by Nielsen in 50 years.

What is more, that allegiance continues to attract advertising dollars. Over the past two years, total television ad spending has risen in excess of one billion dollars to more than $70 billion.

Certainly, audiences will go on splintering; power will increasingly shift to the viewers; businesses will collide and converge in attempts to create new methods for reaching the anywhere / anytime consumer; and television will become different things to different people.

Indeed, for every "early adopter" who has embraced iPods, DVRs and Video-on-Demand, there still are scores of "traditionalists" who prefer to watch TV the old- fashioned way. In the face of this ferment, some things won't change. Advertisers will still need media. Media will need advertisers. And both will continue to need audience research of the highest quality.

Susan Whiting, President and CEO of Nielsen Media Research, joined the firm in 1978 after graduating from Dennison University, assigned to a unit developing new approaches for measuring the emerging medium of cable television. She has since been General Manager of National Services and Emerging Markets and Chief Operating Officer and also currently serves as Executive Vice President of VNU's Media Measurement and Information Group.