MEET THE NIELSENS

The Nielsen ratings determine which shows you see and don't see on TV. The trouble is, the numbers are shaky.

By Elizabeth Jensen

IT'S A NEVER-ENDING TASKBEING A NIELSEN FAMILY. WANT TO WATCH TV? **First you turn** the set on, then you punch a button telling Nielsen Research that it's you, a 27-year-old college-educated male making $59,000 a year, sitting there in front of the tube. Then you can choose your channel. Walk into the room where your 25-year-old wife is already engrossed in *Friends?* Push the button to tell Nielsen you're there. Run to the bathroom during the commercial? Yep, that button should be pushed again, as it should be yet again when you return. And if you have a baby, once she hits two, she too will have to learn to push her own special Nielsen button. The whole family will do this for two years, all for a token reward.

Televison's power lies in its ability to reach tens of millions of viewers at a time. But whether the second night of *60* Minutes or the fledgling Animal Planet cable channel survives depends on just a handful of people-not television executives, but the anonymous button-pushing families whose viewing gets translated into the ubiquitous Nielsen ratings.

The numbers aren't just fodder for TV columnists and Entertainment Tonight. They determine how some $48 billion is spent annually on television advertising. And as the number of channels multiplies and the Internet threatens to nibble away at time spent in front of the tube, each and every viewer has become precious in a fiercely competitive business.

From network shows to cable networks to local newscasts, one tenth of a rating point up or down can determine life or death. That makes Nielsen, the sole provider of those numbers in the United States, a key player in determining what viewers see. And with its numbers drawing increasing scrutiny, Nielsen is causing the TV industry a lot of angst.

Although Nielsen has 5,000 households—more than 12,000 people-in its core national sample that determines the fate of most national shows and networks, some critical numbers frequently come down to just one or households, even one or two people. Tiny cable network Court TV; for example, on a recent December night, drew an average 0.1 rating-equal to three homes-between 8 EM. and midnight. If one of those household members forgot to push that button, the numbers would swing wildly. And because advertisers want to target specific demographic groups, even hit shows can lose revenue if a few men or women in prized age brackets go missing.

Whether Nielsen's system works in such a competitive era has become the subject of much debate. Not that television outlets have much choice: Nielsen, which has been measuring TV viewing since 1950, has had a monopoly on tracking the national numbers-as well as on nearly all of the 210 local markets it monitors-for much of the past decade. (The numbers are paid for largely by the TV networks, stations, and syndicators that sell the airtime; advertisers, which use the ratings to determine what ad time to buy, pay just a fraction of what broadcast and cable outlets spend for the same data.) Nielsen, which became a stand-alone publicly traded company last summer, has invested millions expanding its sample and retrofitting its systems to keep pace with the technological changes tearing up the television landscape, and has spent more than $50 million on the development of a new meter capable of measuring the coming digital channels. Critics say that, so far, however, Nielsen's efforts have fallen short. "It's a forty-year-old system that ran out of acceptability ten to twenty years ago," says Nicholas Schiavone, senior vice-president, research, at NBC.

SCHIAVONE'S CONCERNS ARE ECHOED BY MANY in the industry Advertisers, local stations, and broadcast and cable networks all have gripes with the ratings company, and even Nielsen admits that certain parts of its system are less reliable than others. What difference does it make if Nielsen misses a few viewers here and there? For start-up cable networks, it can mean the difference between success and failure-and Nielsen's sample is so small that if just one or two homes go missing, a lightly viewed cable network's ratings can plummet. And Schiavone estimates that each of the four broadcast networks loses tens of millions of dollars annually because of all of the viewers Nielsen is missing-viewers for which the networks can't charge advertisers.

What really has the industry worried, though, is that the situation threatens to get worse before it gets better.

"The environment that is coming our way, of digital channels and multiplexing, will be so difficult to measure, it will multiply the issues by five-fold," says Alan Wurtzel senior vice-president of media development, brand management, and research at ABC, Inc., noting that viewers will get their video in lots of different ways-they'll watch ABC at the same time as they're downloading video clips on their computer, for example.

Fractionalizing the audience will make measurement harder, "yet the need is greater," says Wurtzel. "Anybody interested in being in the measurement business has to be at the top of their game."

Says one media researcher who asked not to be named: "Nielsen is the coin of the realm, it's the way TV is bought and sold. The question that many of the industry organizations are asking Nielsen is: At what level do we really get nervous? Is it now, a year from now? Can you turn this thing around?"

Nielsen dismisses the sniping as posturing on the part of media outlets trying to find their way in an increasingly competitive environment, noting that much of the criticism comes from broadcast networks that are rapidly losing market share. "Television audience-measurement data is among the best data for business use out there," says John Dimling, Nielsen's president and chief executive.

Still, in an extraordinary move, many of Nielsen's clients, held hostage by Nielsen's monopoly, have tentatively agreed to back up their complaints with action. Twenty-four heavyweight Nielsen users-the four main broadcast networks, three cable networks, a syndicator, 13 advertising agencies, and three advertisers-Procter & Gamble,

CHASING THE YOUNG AUDIENCE

ONCE THEY HAVE THEIR PRECIOUS NIELsen ratings in hand, TV outlets and advertisers begin slicing and dicing the audience into chunks, some more valuable than others. This quest has put ever more pressure on Nielsen to measure smaller and smaller subsets of the population.

It wasn't always so: Historically, networks sold-and advertisers based their decisions on-the number of households tuning in to a specific show. That legacy dated from an era when the woman of the house did most of the households buying, and families did their 'IV-watching as a single unit. All an advertiser cared about was whether the set was on in the home and what channel it was tuned to.

About 15 years ago, advertisers started to "realize that it's not households that buy products, it's people that buy products," says Paul Schulman, whose Schulman/Advanswers NY is one of the largest buyers of network-TV ad time.Today, Junior holes up in his room to watch his own TV, and won't be caught dead wearing clothes he didn't buy himself. Advertisers now ferret out ever-more-specific subsets of viewers, such as, say, 13-to-17-year-olds in households with incomes above $100,000.

TV networks, in turn, chase the audience niches that advertisers want. It makes sense for a new cable network to tailor programming to a narrow audience. It's not as easy for the traditional broadcast networks, which built their business on the premise that they reach a wide, diverse audience, and, in the process, played a role in creating far-reaching brands such as Coca-Cola. Still, the result of this narrowing focus'has been more network shows such as Ally McBeal that appeal to 20- and 30-year-olds and command high ad rates, and fewer shows such as Murder She Wrote, which was popular among older viewers.

In recent years, the demographic chase has been roughest on CBS. A fourth-quarter 1998 study of prime-time viewers by TN Media pegged the median age of the CBS viewer at 52.5 years, compared to 42.9 for NBC, 41.7 for ABC, 37.4 for UPN, 34.1 for Fox, and 26.6 for WB. That means CBS, which from September 21 through January 10 reached more households during prime time than any of its competitors, is at a disadvantage when vying for the advertising dollars targeted at 18-to-49-year-olds-a full half of all the money spent on national TV advertising, estimates CBS.

Advertisers insist that there are sound reasons for paying a premium to reach younger adults. For one, younger viewers are simply harder to find, says Steve Steinberg, senior vice-president and director of broadcast research at TN Media. As for the 50-plus audience, "you can't get out of their way," agrees Schulman. A February 1997 Nielsen Media Research study showed men 18 to 24 years old watched an average 20 hours and 40 mmutes of television each week, compared to 35 hours and 17 minutes for men 55 and up; a similar pattern holds for women.

Conventional advertising wisdom argues that younger consumers change brands more readily and will be consumers for life once they find a preferred brand of, say, toothpaste. "When you target younger viewers, some seeds are planted." says Schulman. On their own, teens and adults up to age 24 earn a combined $320 billion in disposable income, a figure that is growing between 4.5 percent and 5 percent annually, faster than the 2 percent to 3 percent growth in disposable income for the nation as a whole, says Ken Boss, a senior analyst for investment banker Ladenburg Thalmann & Co.

David Poltrack, executive vice-president of research and planning at CBS, counters with a 1993 Nielsen Marketing Research study showing that, on average, 67 percent of female heads of household aged 18-to-34 were willing to sample new brands, versus 70 percent for female household-heads in the 35-to-64-year-old bracket. And, according to a 1992 survey by J.D. Power and Associates, older drivers were more likely to switch brands when buying a replacement car than younger drivers. Poltrack can't dispute that younger viewers are harder to track down, but even so, he says, advertisers who ignore older viewers are missing a growing group-and one with the most discretionary income. —EJ

Kraft Foods, Inc., and The Coca-Cola Company—signed letters of intent over the past year to support a rival service, dubbed S•M•A•R•T (Systems for Measuring and Reporting Television), that is trying to get off the ground. Dimling says Nielsen would welcome the competition.

Nielsen has three main components for measuring television viewing. First, there's the national ratings service compiled from the 5,000-home panel, which uses electronic meters to tell who is watching programs available nationwide. It is used by advertisers who want to buy time on national networks such as CBS and the Discovery Network, as well as on syndicated shows. Second, in 44 local markets including New York and Detroit, Nielsen uses a combination of TV-set meters-which simply track what channel is on-and paper diaries to figure out which viewers are watching. Third, an additional 166 smaller markets are measured using paper diaries alone. The local market data is used by advertisers—such as car dealers-that want to buy time in just a single market, and by larger advertisers—such as regional grocery chains—that want to reach specific cities across the country.

NIELSEN'S CRITICS RATTLE OFF A RAFT of excruciatingly technical measures in which the ratings service is deficient, from response rates in "telephone frame surveys" to "in-tab rates" for households with numerous TV sets. But parts of Nielsen's methodology also defy common sense, even to those without an advanced degree in statistics.

Take the paper diaries that Nielsen uses to determine viewership in markets such as Saginaw.

Michigan, and Worcester, Massachusetts, during the so-called sweeps months of February, May, July, and November. Residents are contacted by phone; if they agree to keep diaries, they fill out one book for each TV set in their home, marking down, in 15-minute blocks for a week, who is watching and what they are watching.

The diary method worked well in the 1960s, when the system was refined. There were only a handful of channels then, and the whole family gathered round a single set. Today, however, it's just not reasonable to expect seven-year-old Johnny and four-year-old Mary to recall exactly which cartoons they watched early Saturday morning and when, so Mom can fill in a diary for the TV in the basement rec room. And if Dad doesn't fill out his weekly diary every evening, how will he possibly remember a few days later just which cable network he landed on as he went clicking through the nearly 100 offerings available on his cable box? (In fact, a recent survey showed that a full 20 percent of the homes keeping Nielsen diaries receive 120 or more cable channels.)

Then there are Nielsen's rules for determining which channel gets credit in a diary. If Dad spends less than five minutes on a specific channel in any given 15 minute block, then that channel gets no credit for any of that time. If he watches five minutes or more, however, then the channel gets a windfall: credit for a full 15 minutes. So someone who watches five minutes each of, say, MTV, VH-1, and NBC in a single quarter-hour will be recorded as having watched 15 minutes of each, consistently overstating the size of the audience in local markets.

Then there are the problems-not Nielsen's doing but problems, nonetheless--in figuring out just what a viewer was watching. Diaries come to Nielsen's Dunedin, Florida, operations center marked with such entries as "Watched the news with the nice-looking anchor with glasses." Or viewers name a station and channel number, but name the anchor from a rival station. Or they'll say they watched a show, but write down the wrong time. Nielsen's workers, many of them retirees who work part-time during Nielsen sweeps periods, must decipher the conflicting information. And Nielsen can do nothing about the viewers who lie when filling out their diaries-saying they watched the news, for example, when they were really tuned to the Playboy Channel.

Much of the criticism of Nielsen these days revolves around its problem getting viewers to cooperate. Deluged by telemarketers and increasingly time-stressed, TV viewers simply aren't agreeing to fill out diaries or accept meters when Nielsen calls, leading to record-low "response rates." During the May 1998 measurement period, one study showed that just 31.7 percent of those contacted agreed to fill out diaries, a 22 percent decline from 1994. And last year, an average of 13 percent of St. Louis viewers agreed to accept local meters when Nielsen asked. "You might as well throw darts," says NBC's Schiavone. Still, the choices made by that 13 percent were treated as representative of all TV viewers in the market.

Another problem plaguing Nielsen: the so-called "in-tab rates," which are also dropping sharply in some areas. In-tab rates. refer to the number of people who agree to participate and actually fill out and return a diary or whose meters are functioning day-m-day

In its national sample of 5,000 homes, Nielsen has dramatically improved its in-tab rates in the last two years, after complaints reached a fever pitch, and as the rival S•M•A•R•T experiment began to gain ground. But Nielsen's clients continue to find areas of concern: This fall, Nielsen has reported an 8 percent drop in viewing by 18-to-34-year-old adults, a key constituency for networks such as Fox. The networks attribute the unusual drop to an underrepresentation of such viewers in Nielsen's sample; Nielsen counters that young viewers are just watching less television, a decline that has been consistent since 1991.

Other areas of concern include low cooperation rates among Hispanics and African-Americans in Nielsen's local measurement. And some of Nielsen's biggest cooperation problems come from homes with more than one TV set--the kinds of viewers that the TV industry would like to have measured, because with more sets, they are likely to be watching more TV.

OTHER CRITICISMS OF NIELSEN ARE ALL OVER the map. One longstanding complaint: the ratings that Nielsen compiles for viewers as young as two. In fact, that's one place where the diary probably holds up-a parent fills in the information for a child. But to get its national ratings, Nielsen requires each viewer in its 5,000 homes to push a pre-assigned button on a remote-control device known as a people-meter to let the set know who is actually watching. Young children simply don't remember to push the buttons each time, studies have shown.

Nielsen also doesn't measure out-of-home viewing in places like vacation homes, day-care

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HOW FOUR VIEWERS CAN BE WORTH $50 MILLION

FOX'S QUIRKY HIT ALLY MCBEAL DOESN'T suffer from a lack of viewers, and her short skirts and confused love life appeal particularly to the 18- to 49-year-olds advertisers love. Yet, even Ally could benefit from one thing both Nielsen and its critics agree on: the need for larger Nielsen sample sizes.

On November 9, 1998, Ally was the second-ranked prime-time show among adults aged 18 to 49, with an 8.2 rating. That translated into 8.2 percent of all adults in that age group. Moreover, the show drew 10.2 percent of all women 18 to 49.

But viewed in terms of Nielsen's sample, the strong showing looks more arbitrary. That week, in Nielsen's 5,000-home sample, there were an average 6,352 adults between the ages of 19 and 49, of whom, 3,303 were women. But that week, fewer than 85 percent of those sample members were "in-tab," or actually returning usable data to Nielsen (among men 18 to 34, just 80 percent were in-tab). That means 5,259 adults were producing the ratings, of whom 2,764 were women.

So Ally's 8.2 rating was produced by 431 sample viewers tuning in; during an average minute; for the 10.2 rating among women 18 to 49, just 282 women of that age in the sample tuned in.

To make that rating change by one-tenth of a rating point-which is considered significant-just three women would have had to tune in, or not tune in, during an average minute. The adult rating could have been changed by a mere four adults.

What does a tenth of a rating point mean? Well, of one of the Big Four broadcast networks lost just one-tenth of a rating point across its entire prime-time schedule over the course of a year, it might miss out on as much as $50 million in ad revenues, at current average network ad prices, according to one network executive. That's $50 million in the hands of just a few of Nielsen's sample members.

As for a cable channel that averages a .3 or .4 rating, as many do, that same handful of people-equal to one-tenth of a rating point-could cause the channels ratings, and thus its revenues, to swing by 25 to 33 percent either way

—*EJ*

COURTESY OF NIELSEN RESEARCH

centers, or college dorms, depriving, say, soap operas of their college-age viewers.

Nielsen concedes some problems, but blames many on the industry itself, which can't agree on which changes should be made-and generally won't pay for improvements.

For example, Nielsen doesn't dispute that its diary has problems. The company has experimented with minor changes to the diary method testing one-day diaries and having each household member fill out a book, instead of having a book for each TV set. But Nielsen spokesman Jack Loftus says he doesn't expect big changes. "It's still going to be a diary with all the blemishes it's always had," he says. "It's not a medium friendly to cable or independent stations."

Nielsen would prefer instead that its local-market clients spend extra to install more reliable electronic set meters, and the company blames the industry for perpetuating the diary method. In some ways, the industry has only itself to blame, as some players with a vested interest cling to diaries, despite the fact that they are outmoded. The diaries rely heavily on viewers' ability to recall what they watched during the week, and thus favor big, established, mostly network stations over upstarts. But Nielsen charges its clients three times more for set meters, which are more reliable than diaries, and many stations refuse to subscribe. Without a way to recoup the costs, Nielsen won't make the switch.

As for response rates and in-tab rates, Nielsen says it shares its critics' concerns. "Nobody can deny that we've been attempting to improve cooperation," says Dimling, pointing to improved recruiter training for the national sample as well as to a new Nielsen test to recruit respondents in local set-metered markets by going to their homes instead of just calling them.

However, Dimling says many of the complaints-that a handful of homes can determine the fate of small cable networks, for example—could be solved by expanding the size of the sample, thus reducing the error rate. "Sometimes, we as an industry expect too much of samples," he says. "All things being equal, we would rather have a larger sample size . . . It's in the interests of a lot of people to find the resources to do that." But not everyone is willing to pay for that expansion, and Nielsen argues that it can't shoulder the burden alone.

The fast-approaching digital era, which many Nielsen clients dread, may be a boon to Nielsen. The company is testing a new meter, in development since 1991. Called the A/P (for active/passive) meter, the device is designed to measure the complex digital environment by reading audio and video codes embedded in a program's signal. (With a couple of exceptions, the current system simply measures which channel number the TV is tuned to, and then compares that to a market-by-market list of which network or program airs on that channel at that time.) The new A/P meter is easier to install than Nielsen's existing meters, meaning less disruption for the homes that agree to take the meters and less time that Nielsen will have to spend on installation.

FOR MANY CLIENTS, HOWEVER, THE CHANGES are coming too late. With their frustration at a boiling point, five years ago ABC, CBS, NBC, and Fox gave $40 million to a company called Statistical Research, Inc. (SRI), which had developed what it said was a better way to measure national audiences, with a people-meter that is easier to use and less intrusive to install. The experiment was derided by Nielsen, as well as by many advertisers and cable networks, who feared that it was meant to produce ratings that favored the beleaguered broadcasters.

But S•M•A•R•T persisted. SRI set up a 500-home test in Philadelphia, with results that convinced an extraordinary coalition of networks, both broadcast and cable, and advertisers to sign on as sponsors, and, later, sign letters of intent to support the system if it goes into the marketplace.

Some have supported S•M•A•R•T for its methodology but others simply like the fact that S•M•A•R•T promises to give its clients all of its data, so they themselves can generate the specialized reports for which Nielsen charges extra-but often takes months to produce. (Nielsen has recently promised a similar system, but is months late in delivering it.) Still others are concerned that without a rival, Nielsen will be able to jack up its prices with abandon.

S•M•A•R•T has already served a purpose: "Almost every improvement [Nielsen has] made recently is tied to SRI," says David Poltrack, CBS's executive vice-president of research and planning, in the same way that Nielsen only introduced its people-meters in 1987 after a rival, AGB, a British audience research firm, tried to launch a U.S. people-meter service.

AGB's ultimately frustrating experience may foreshadow the death of S•M•A•R•T, however. The British company lost $67 million before it was forced to shut down its American effort in 1988 for lack of widespread support from companies who felt they could only afford to subscribe to a single service.

SRI, mindful that AGB and other Nielsen wanna-bes have lost an estimated $200 million in the last 15 years, has been searching for backers to put up the $100 million needed to get off the ground. Originally, ABC, CBS, NBC, and Fox were to put in almost all of the seed money, but the broadcasters have backed away from that plan as their profit margins tumbled. Decisions on whether to proceed are imminent.

If S•M•A•R•T gets off the ground, its service would initially only be national, which wouldn't address concerns with the local-market measurement systems. Two large cable operators, Tele-Communications, Inc., and MediaOne, are experimenting with systems designed to measure local cable viewing. And an increasing number of advanced cable boxes are able to provide exact tuning numbers for every channel every minute of the day Nielsen may soon be able to access at least some of that data under recent agreements it made with cable-system owner Time Warner Inc., and others. Those numbers won't be a cure-all for ratings woes, however, because they won't measure who is sitting in front of the sets, or what the 24 percent of the nations viewers without cable or satellite programming are watching.

So, for the moment, clients' main recourse seems to be pressuring Nielsen to do better. At least two networks have flirted in recent years with suing Nielsen for not meeting its obligations, and just last fall the Media Ratings Council, a congressionally mandated watchdog of the ratings services, contemplated the almost unthinkable action of withdrawing its accreditation of Nielsen's local-market service. The December vote ultimately fell short. And while losing accreditation would have been embarrassing for Nielsen, it wouldn't have changed much for the industry, which still needs numbers-even numbers it doesn't like-to sell its ads.