

CUTTING THE FEET TO FIT THE SHOES

A story of TV Audience Measurement

TV audience measurement is a typical case of the tail wagging the dog, where an investment of a few million dollars ends up deciding the fate of billions of advertising dollars.

One morning, in one of the Latin-American countries, the physical addresses of all households in the audience measurement panel were leaked to everyone who mattered. On receiving the list, the CEO of the second largest broadcaster in that country approached one of the households to see the peplemeter. As it was trained, the household denied possession of any meter. On seeing a 100 US dollar bill, the household changed its mind.

As he described to me later, the CEO was shocked to see a mess of wires and connectors with the meter. As I told him, the surprise to me was that the broadcaster, a part of a large corporate conglomerate whose owner is one of the top 50 billionaires in the world, though unhappy with the ratings it was receiving, had never asked the rating company to show and demonstrate to them what the technology was and how did it work. Here clearly the tail was wagging the dog.

Over the years it has come to be believed that there should be a single measurement service (single currency), presumably since multiple audience measurement numbers make it harder to price, buy, and sell advertising time. The chorus for single-currency is generally led by the media agencies, who essentially are the agents for advertisers. The large advertisers often have no strong opinion on the subject since they largely leave their media planning and buying to their agencies.

But in the endeavor to obtain the convenience of a single currency, the industry has cut its feet to fit the shoes.

Almost everywhere, TV channels that are not happy with the numbers that their ratings company produces, have one or more of the following complaints:

1. Inadequate panel size
2. Skewed panel distribution
3. Biasedness
4. Unethical practices including corruption

But what is seldom questioned is the following

1. Hardware technology used for measurement
2. Ills/demerits of monopolised ratings service
3. Issues related to moral hazards

My other observations are that:

1. Nobody wants the right numbers; everyone wants high numbers

2. Broadcasters, not happy with the numbers they get, often believe that the ratings game is fixed by one of their competitors
3. More often than not, broadcasters feel helpless under the tyranny of a single number.

Most users of audience measurement data know very little about what lies under the hood of a ratings system, be it:

1. Hardware (peplemeters);
2. Panel design, distribution and maintenance; or
3. Calculation of metrics including margin of error.

For example, I haven't met a media professional who knew how to calculate the margins of error for the ratings data. It's a different matter that I also haven't met a ratings agency that would give them the required data. More often than not, it is a case of the blind leading the blind.

In my experience, most of the problems with a ratings service arise from the fetish with a single currency. Or the least one can say is that most of the problems can be solved if we give up this fetish. But before we get there, let us briefly understand a bit about the peplemeter technology.

Peplemeters:

In the evolution of peplemeters, different types of peplemeters differ from each other on the following two aspects:

1. Definition of viewership data (tuner frequency, sound samples, watermarks, or images)
2. Mode of data transmission (manual i.e. by visiting panel households, telephonically, or GPRS i.e. over Internet)

Without getting into the relative merits of the above seven variables (4 data types and 3 transmission modes), let us recognize that a perfect audience measurement technology doesn't exist. Given the high stakes (advertising dollars) in the game, where a small error can lead to grossly disproportionate consequences for the broadcasters, it's the demerits rather than merits of the technology that should decide the choice of technology. In other words, we should be looking for the least imperfect options.

The dominating technology of today is watermarks as data and GPRS as mode of data transmission. So, let us limit ourselves to assessing this technology.

Watermarking:

Let us begin by understanding the imperfections of the watermarking technology. Under this technology, the peplemeters are meant to read the audio watermarks inserted by the broadcasters in their broadcast streams. So obviously this system can't measure any viewed content that isn't watermarked. This includes:

1. The channels that refuse to watermark their content
2. Exponentially increasing over-the-top (OTT) content (Netflix, Amazon Prime, Disney Plus, Disney Hotstar, YouTube, BritBox etc.)
3. Foreign free-to-air channels received in the border areas
4. PlayStation, Xbox usage.

Moreover, there is a critical risk with this technology. If the downstream cable operators don't use the right equipment, watermarks can be lost during modulation and demodulation of the audio feed at the cable headend. Therefore, it is important that tests are conducted at all downstream cable headends periodically to ensure that watermarks do reach all the peplemeters.

All this notwithstanding, there is another fatal flaw with this technology that we will discuss later in this article.

Many of the problems associated with watermarking technology can be eliminated if the 'data' is not a watermark but a complete screenshot of TV screen. To this end, the TVs must have a video-out port. Right now, such ports are available only in Europe. In Europe, all TVs have a SCART port which is an input as well as output port.

Having gotten the technology out of the way, let us come to our fetish for single-currency whereby we have cut our feet to fit the shoe by creating ratings monopolies.

Monopoly:

Once, in a meeting with the minister of Information & Broadcasting in India, when asked to expand the service to rural market arose, the American ratings giant described the high cost of peplemeters as a deterrent against the expansion. It wanted the users to agree to much higher subscription rates before undertaking the expansion. Asked about the cost of a meter, the giant quoted US \$2,000. I intervened to ask why the price was \$2,000 and not \$5,000 or \$10,000. 'Price' is a price at which there is a buyer and a seller. In the case of that giant, the seller was the parent company in the USA, and buyer was its Indian subsidiary, and so any price was just a transfer price set to suit the giant's business interest.

This, in short, is the story of a monopoly.

What does this monopoly lead to, particularly in the context of the dominating watermarking technology?

1. Unless a broadcaster pays a king's ransom to be rated, its audience is not measured (since they can't insert watermarks). In effect they can't price their commercial time objectively.
2. If the sampling plan (number and distribution of the panel households) produces lumpy data for their channel, the broadcaster can do nothing about it. It often happens to small and niche channels.
3. Monopolistic pricing of subscription tariff. Resistance to panel expansion unless the users are ready to pay a big price.

4. The system is easier to manipulate since there is just one player to fix. Accusations are rife that broadcasters often seek to 'appease' some crucial insiders in a ratings company and everything is set.
5. No matter how unhappy the industry may be, uprooting a monopoly is extremely difficult. It is interesting to note that the rating giants almost always fail as aggressors (when they enter a new market to challenge an existing player) and succeed as defenders (when they are being challenged by a new entrant).
6. The ratings company resists all pressures to be transparent. Later in this article, we will list some examples of the kind of transparency the broadcasters could demand of a ratings company.

Very often, competition brings immediate gains to the market, before a new entrant challenged an established ratings giant in a country, the giant, in a series of interviews, all available online, insisted that its experts had advised it that the country needed no more than 3,500 households. The challenger started its panel with 5,000 households. In response, the entrenched giant immediately dumped all the expert advice and expanded its panel.

While discussing watermarking technology I had hinted at a fatal flaw in this technology. Watermarking, by its very nature, is a monopolistic technology. If for a moment we were to envisage a market with multiple rating companies, can you imagine the broadcasters inserting multiple watermarks?

Moral Hazard:

It is an agreed principle that no media agency, advertiser, or broadcaster should own or have a share in the ownership of the rating agency.

*In one country, a rating company used to collect data from peplemeters by visiting panel households every week and release data **weekly**. Then a new rating company entered the market with a larger panel and the technology to collect the data telephonically and release it **daily**. But the entrenched ratings company was co-owned by a rating giant and media buying giant. This media buying giant, in turn bought almost 40% of the media in the country, and since it co-owned the current rating company, refused to accept that.*

Monopoly, coming in the garb of single-currency, combined with ownership of the rating company by a media agency or broadcaster leaves the broadcasters no way out of the possibilities of unethical practices, genuine errors, bad panel management, and possibilities of manipulation of data.

The Blind leading the blind:

When I was running a ratings service, I was once asked by a senior media professional at a multinational media agency what the margin of error in our data was. I gave out a number; he accepted it. The point is that there is nothing like a general margin of error number in the ratings data. Besides, among other things, margin of error depends on the variability of

viewership. And the variability of viewing over different time horizons will yield different numbers. It was so obvious that he really didn't understand what margin of error is.

It has been my experience that most of the media professionals are inadequately trained on how to interpret the ratings data, and on how to ask hard questions. Most of them work as automatons. Their knowledge is limited to the ratings jargon.

Summing up:

By creating ratings monopolies in the endeavor to obtain the convenience of a single currency, the industry has found a cure that is worse than the disease. It has cut its feet to fit the shoes. The truth is that most of the audience measurement panels have inadequate coverage for public broadcasters' audience measurement, and produce very high margins of error for small, and niche channels.

Till the idea of single-currency meets its well-deserved death, a few things can be corrected by asking the ratings companies some hard questions. Here are some of things the broadcasters, through their industry associations, should do.

What should the broadcasters do and ask?

The state of the affairs in the ratings business has been described in this article with the following three idioms:

1. The tail wags the dog
2. The blind leading the blind
3. Cutting the feet to fit the shoes

In light of these, here are my suggestions:

1. Build expertise. Understand strengths and weaknesses of measurement technologies.
2. As a group, broadcasters should insist on active participation. Take nothing on reputation (All that glitters is not gold). Test each component of the supply chain. Insist on a number of checks and balances.
3. Resist/fight monopolistic forces including monopolistic technologies.
4. Ensure no media agency or broadcaster has co-ownership of the ratings company.
5. Insist on transparency. Some of the possible initiatives with watermarking are described in the following paragraphs.
6. Work towards a regulator/oversight mechanism.

Some of transparency initiatives that should go with the currently dominating watermarking technology are as follows:

1. If the data from peplemeters is transmitted over an Internet connection, it is possible to see, in real time, the state of each meter in the panel. The possible status/scenarios could be:
 - a. The meter is working but with no TV viewing on the TV connected to that meter since previous midnight.

- b. The TV connected to a meter is being viewed right now.
- c. The meter is inactive and needs fixing.

The ratings company should be asked to provide access to such a real-time dashboard to the broadcasters' council/group/association.

2. While the meter may not be able to measure non-watermarked content individually, it could provide an estimate of total volume (in hours) of non-watermarked content viewing.
3. The broadcasters' council should ask the ratings company to install a few meters at the location specified by it. While the data from these meters will certainly not form a part of the panel data, the ratings company must provide a detailed log of TV viewing on TVs connected to these meters. The council will maintain its own log of TV viewing on these meters, and compare them with the data provided by the ratings company to see if the ratings company is getting the data right?
4. Run periodic tests to ensure that the watermarks are not lost at any of the cable headends.

These are just a few examples of transparency whereby a ratings company can reassure its client broadcasters without compromising on the panel's confidentiality. But the monopoly protects it from answering hard questions.

About the author of this article:

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A brief view of this system can be had at

<https://www.ctrack.tv/?page=AudienceMeasurement>