Scientific entertainment
By Howard Thomas

Howard Thomas has been working in entertainment and media for 36 years. His experience with TV started from the beginning in South Africa, and he is now a media business consultant, trainer and specialist in audience psychology.

In just the past few weeks, I have seen the word "scientific" attached to the subject "entertainment".

If "scientific" is the way we do things, then I dread to think how my doctor works, or how they get the space shuttle up to the orbiting station.

It seems to be a virus going round, as I have just seen "scientific" attached to radio station clocks and formats.

I think I know where all this is coming from.

Competition is steep. We have a plethora of radio stations and more on the way. We have some sixty TV channels available and more coming. There are kids who are web casting "radio stations" from their home PC's and drawing in a private audience of their friends (interesting to know the copyright implications of these little home industries!)

What is You Tube other than a TV version of a 'free for all' phone in?

So let's look at what is really happening, and why all of sudden radio and TV are 'scientific'?

The station owners are sweating a little. They want 20% growth a year, and if they are getting it now, they know that it won't last long. So they put the screws on the financial manager, and tell him to check that all decisions made are wise and "in the interest of the shareholders".

In turn, the financial manager (affectionately known to all as the bean counter), demands situation analyses, strategy reports, audience forecasts and so on from all the ad sales and programming people.

What do they do? Well first of all they cannot really deliver what the bean counter wants, and more than anything else, that want him off their backs. So they give him lots of "forecasts and analyses" that really look good – after all, they are creative people. He asks how they got all this data, so they tell him that he mustn't worry, it's all quite scientific.

That make him happy, he sends the stuff on to the owner, who presumably may remember that there are actually shareholders,

When things go all pear shaped, the broadcasters all jump ship and leave the bean counter carrying he baby, at least that's what we hope will happen.

But how scientific is it?

I found a cute little mathematical formula for calculating whether a creative work is financially worth while. It's in Richard Caves book on the creative industries ands says that:

max $u = u$ (wvc, $(1-w)$ ve $0 \leq w \leq 1$

Well that solves it all – except that there are so many variables in this formula, that you may as well go back you your instinct – it's quicker.

Do you know that if you want to calculate the churn you will experience in pay-TV subscribers, you just have to use this formula?

$$CLV = \sum_{t=1}^{n} \frac{m_t}{(1+i)^t}$$

Wow, isn't nature wonderful?

I have sat with audience researchers and we went through four years of ratings for TV soap, and mathematically aligned fluctuations to the seasons, public events, consumer confidence statistics and to the subject matter of the sub plots, and we came up with a fascinating formula, variations of which will predict the audience for a soap opera. It's this:

$$|\delta \mathbf{Z}(t)| \approx e^{\lambda t} |\delta \mathbf{Z}_0|$$

The above formula is one of those used in chaos mathematics. We didn't actually use it, as we don't actually understand it, but it's wonderful for showing the bean counter to get him off your back.

The one person who put it the best is Prof Susan Tyler Eastman, the only person to write a really good book on media programming. She said, "The networks and other program suppliers do not sponsor much theoretical research, although applied research (ratings) is a must. Ideas are tested, and pilots are tested, **but programming seems to remain one big gamble where instinct is more important than science."**

Don't tell the bean counter or the owner.

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