

8

Who Should You Impress (and Where Are They Hiding)?

When we talk of the media, it is easy to forget that they are brands and, just like any other type, carry different values, levels of trust and expectations.

Sheila Byfield, ESOMAR Conference, 2002



Writing about reach is not as easy as it used to be. On the one hand well-established theory gives us a simple narrative on how to grow a brand. Reach many category buyers when they are in the market to buy and your brand will grow; the best place to find big numbers of these category buyers are in big, not niche, media. But the reality of the 2020 media marketplace is that the value of a reach point across media is not the same. So, are sweeping statements about ‘buying big media’ even relevant in this landscape? Here’s my approach. First I describe who you should impress if you want your brand to grow from a theoretical perspective. That part remains constant. What *is* changing is where and how to find them. Which is why it’s useful to outline the practical reality of finding those worthy of impressing, now and for the future.

8.1 The Theoretical Answer...

...is certainly not ‘The Persuadables’. You may have heard of them, they represent the more recent efforts of an advertising obsession with heavy buyers. More on them later, but let’s start with how it should be done.

Increasing a brand’s penetration rates (sheer number of buyers) will have a significantly greater impact on its market share compared with attempting to increase loyalty—this is not new news. For advertisers, this translates to the need to reach a high concentration of (unique) category buyers across the whole customer base. Based on the NBD-Dirichlet, there are a number of justifications for this recommendation, the most important being that reach-based campaigns are better placed to deliver long-term brand building as shown in Fig. 8.1. Binet and Field’s work continues to prove, along with other scholarly work, that advertising that reaches a broad audience is more effective in driving brand growth than advertising that targets a smaller and more ‘demographically relevant’ audience.

Regardless of the relentless ‘hyper-targeting will harm your brand’ message from many credible marketing effectiveness scholars around the world, advertisers still obsess over tightly defining the target audience and seeking out only the media that deliver specific audiences. The fact that this will serve to isolate their brand seems to be lost on them, potentially through fear that a broadly targeted campaign will deliver wastage outside of their demographic. Or worse, that they won’t see any immediate effect. This thinking is a vicious and downward circle. Those that are most likely to buy immediately are those who are already heavier buyers of the brand. They provide the least opportunity to grow penetration because there are fewer of them than light buyers and their capacity to buy extra is limited.

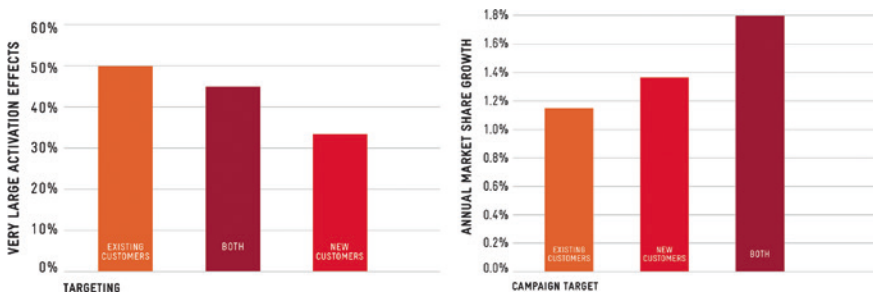


Fig. 8.1 Targeting versus broad reach (Field and Binet, IPA, Thinkbox and Google, 2017)

A recent high-profile case study promoting the targeting of heavy buyers came out of the USA in 2017 by Rubinson Partners, Nielsen Catalina Solutions (NCS) and Viant. Called The Persuadables, this three-brand study actively points out up front that *persuadables* are heavy brand buyers who have been targeted based on the principles of recency. The goal being to find out whether targeting heavy buyers, using recency planning principles, can generate better return on ad spend than targeting lighter buyers. Recency theory is a concept popularised by the late Erwin Ephron, a concept proven as far back as the 1990s. It suggests an ad is most effective when it hits the buyer close to the purchase occasion (see Quick Explainer: Erwin Ephron, Reach Don't Teach).

REMEMBER THIS SIMPLE TRUTH

The biggest uplift in response to advertising comes from simply being exposed at all, rather than being exposed repeatedly.

The authors gathered in-store purchase history from NCS to determine buying segments ranging from non-buyers to heavies (aka The Persuadables). Then, using look-a-like modelling with Viant data, buyer segments were exposed to brand campaigns. The difference in the rate of sales between the exposed group and a non-exposed control group was used to calculate incremental sales dollars.

Let's be clear, their clever use of sales data, look-a-like modelling and technology to target buyer segments during the buying window based on actual brand usage, should be applauded. They have avoided using demographics, which have almost no relationship with actual buyer behaviour, nor relevance to recency. While applauding its use, I will make one small caveat, not all look-a-like modelling is the same and not all data brokers deliver audience accuracy (Neumann et al. 2019).

What is less honourable is their ode to the heavy buyer. Their findings show that heavy buyers who are presented with a brand campaign when they are in the buying window, are significantly more likely (up to 16x) to buy than light buyers hit with the same campaign in their buying window. The authors follow with a recommendation to advertisers to move money from targeting light buyers to heavies. Trouble is, heavy buyers are more likely to respond to brand advertising because they are already heavy buyers of the brand. The chance they will be nudged to buy again in their buying window is pretty high. So, focusing media dollars on heavy buyers is like paying double for a sure thing.

Worse, focusing less on light buyers simply because the advertising was less likely to have an immediate effect, will ensure brand decline.

The only thing light buyers are loyal to is switching, which is why it is a game of numbers. Sometimes advertising will nudge their propensity to buy Brand A, other times it won't and they will choose Brand B. This is why an *always-on* approach has been considered optimal, because light buyers buy at near random rates. At the risk of sounding like a broken record, advertising is not persuasive. Nudging that light buyer takes more than a single campaign exposure, but because of the sheer numbers of light buyers, if you nudge enough them over the year to buy even once more, brand penetration numbers will grow. If you overspend on heavy buyers, nothing will change other than a reduction in profit.

The concept of The Persuadables is at the heart of Binet and Field's short-termism battle. Advertisers continue to be lured by the idea of targeting those who render the greatest opportunity for an immediate effect, rather than those who offer long-term brand growth. Although, at least the study used technology to target actual buyer segments in the buying window, rather than transient data from cookies or other (useless) proxies.

REMEMBER THIS SIMPLE TRUTH

A 16x return on ad spend off a (small) heavy buyer base means less to a brand in the longer term than a much smaller return on ad spend off a (large) light buyer base.

You won't find your buyers hiding in demographics either. To demonstrate the value of category targeting over demographic targeting, a study was done in 2018 by the Marketing Scientist Group. The Persuadables study looked at the difference in value between the types of category buyers (i.e. light, medium, heavy), whereas this one considered the value of category buyers compared to demographic groups. The study focused on uplift in ad effectiveness metrics (i.e. correct branding, likeability etc.) between Gen Z/ millennials compared to Gen X. Overall, it covers an age range of 14–54 years. It then considered the uplift in these same metrics when comparing recent category buyers versus non-buyers for the *same* ads. The study showed there was largely no difference in uplift in ad metrics when comparing across demographic groups, but there was a considerable difference in uplift between category buyers and non-buyers. Again, this demonstrates the value of category targeting over demographic targeting which often bears little or no relationship to actual purchase behaviour.

REMEMBER THIS SIMPLE TRUTH

Demographics bear little or no relationship to actual purchase behaviour.

QUICK EXPLAINER**Erwin Ephron 'Reach don't Teach'**

Erwin Ephron was an ad man who happened to understand, and manage to articulate, the implications of media/math relationships. One such relationship was that between advertising frequency and impact. He transformed the industry with the concept of *recency planning* where, he argued, that advertising should reach as many people as possible with the dollars available and close to the purchase occasion. Rather than trying to hit them over the head with repeated frequency until they succumbed to the offer.

Proponents of persuasion theory struggled with Ephron's recency planning, as did media whose commercial model was built on selling repeated exposures. It was in direct contrast to the *effective frequency* concept they had been relying on since the 1960s. Effective frequency alleged that an exact number of exposures has to be seen by a potential consumer before they would be *persuaded* to buy. This concept is still practised today, and the recommended number sits at an average of 3+ frequency.

The theoretical foundation for effective frequency has been proven as flawed from the work of Colin McDonald, Leslie Wood, John Philip Jones and others in the 1990s. In their analyses of single-source data, they showed that the advertising impact from reaching a potential buyer with a campaign was more substantial than an existing audience member seeing the ad a second, third, fourth... time. They not only concluded that a single exposure was sufficient to elicit a purchase, but that the advertising impact on buying propensities was greater amongst those who were exposed at all, than it was amongst those who were exposed more often.

The empirically observed convex advertising response function (shown in Fig. 8.2), shows the greatest uplift in sales propensity resulting from the first exposure, with a further increase, but at a decreasing rate for all following exposures. Two alternative distributions may have been theoretically possible, but have not been observed empirically (the S-shaped response function and a linear response function).

Had effective frequency really been necessary for the most efficient media scheduling approach, then we would have expected an S-shaped response function where the greatest uplift should have occurred at 3 exposures. But this is not observed in empirical advertising effectiveness studies. Nor is a linear shape, where additional exposures drive up buying propensity at an equal rate for each view. The convex shape is closest to reality.

Ephron makes the important point that recency planning never claims that one exposure is enough. That, in the short term, additional exposures are more often wasteful, because the recipient is not likely in the market.

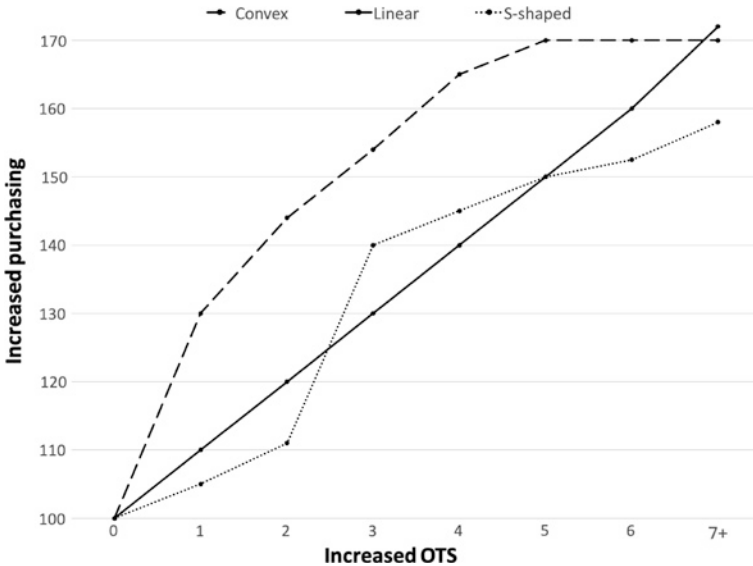


Fig. 8.2 Is once really enough? Measuring the advertising response function (Taylor 2010)

8.1.1 Media Behaving 'Brandy'

We have discussed The Law of Double Jeopardy and The Duplication of Purchase Law in relation to consumer brands. Well these statistical patterns have been found to occur in media too. Big media have larger audiences, who consume (view/read/listen) that media slightly more often or for longer depending on the loyalty metric used. And the audience of big media consume other smaller media less often or for less time, whereas audiences of smaller media consume larger media more often/longer time.

Stepping back in time to the 1960s, seminal studies of how audiences behave were conducted with the objective of identifying patterns in a person's viewing which could then be generalised and used to describe the nature of viewing behaviour (Goodhardt and Ehrenberg 1969; Goodhardt et al. 1987). They sought to understand the extent to which any two programs were watched by the same people. The main finding showed that just one factor had a major influence on the level of audience duplication—the rating or audience size of each program. They found positive correlations were evident between measures of audience *size* (rating) and *loyalty* (e.g. repeat viewing, viewing hours per channel, appreciation score, etc.). Coined the Duplication of Viewing Law, because of its parallel to consumer brands, the study revealed

that viewers of Program B who also watch Program A is aligned to A's rating in the population as a whole. These findings were groundbreaking in their ability to determine a program's level of unique reach.

In the meantime, separate studies on the relationship between reach and viewing frequency found that the two measures varied in a highly systematic way. The relationship was found to follow the well known Double Jeopardy pattern where smaller channels were found to have fewer viewers who watched them less. Both laws were later found to hold in TV channel viewing, print viewership and radio listening. By 2005, the first work on cross-media patterns surfaced to consider how loyal consumers were to any one media type over another. Specifically, how audiences interacted with media across television, radio, newspaper and magazine. The patterns held.

A generalisation was now well and truly established: media do behave like brands. The viewing patterns of media audiences behave just like the customer bases of consumer brands.

By 2013 a study by the Ehrenberg-Bass Institute (using 2007–2010 data) considered cross-website visiting behaviour in UK and Australia. Websites included Yahoo!, AOL, MySpace, MSN-WL, Virgin Media and general sites representing the internet as a category (although these are not defined). Again, the Duplication of Viewing pattern was evident in both sets of data. But, the rise of the super socials feels like it has changed everything—dramatically! Using our Australian 2018 data (1520 people) we wanted to understand whether these patterns hold in the Facebook/YouTube/Twitterverse some ten years on. And they do. We found that Facebook, the largest reaching media within its direct ecosystem, shares its audience the least with its competitors (see Table 8.1).

Table 8.1 Media size and loyalty (Double Jeopardy within online ecosystem)

Online social platforms ($R^2 = 0.95$)	Market share (online users)	Penetration (online users)	No. of platforms used (loyalty)
Facebook	23	90	4.1
YouTube	19	74	4.5
Instagram	14	55	5.1
Snapchat	9	35	5.4
WhatsApp	8	30	5.4
Pinterest	7	26	5.5
Twitter	6	22	5.9
LinkedIn	6	22	5.8
Google+	5	22	5.4
Buzzfeed	3	11	6.6
Reddit	3	10	6.2
Total/Average	100		5.4

What we really wanted to know is whether the patterns hold across the top competing platforms in the broader landscape. A consideration of those who fight directly for each other's ad dollars. And, yes, they do hold.

Of Facebook users 75% also watch TV, and 87% of TV viewers also use Facebook. Snapchat shares its audience most with its competitors, which is as expected and in line with its market share. What this says is that overall the very large majority of any competing media audience (92%) can also be accessible with a Facebook campaign.

REMEMBER THIS SIMPLE TRUTH

All media types display Double Jeopardy: larger media have more people who view/read/listen more often. All media types display Duplication of Viewing: larger media share their audience less with smaller media.

So, you get the gist. These mathematical patterns hold within and across the very large majority of media, regardless of this crazy media landscape we find ourselves in. The point is, that there are some benefits of being the largest penetration media brand. The most bleedingly obvious is that bigger media give advertisers potential access to greater numbers of viewers who also view slightly more often/for a longer period and, consequently, have the greatest access to category buyers. Larger media also deliver the largest proportion of *unique reach*. This is why the Duplication of Viewing Law is so handy. We can use it to understand the extent to which any two media type/channels/programs are watched by the same people in the same period.

So, when we say that 75% of Facebook users also watch TV, this means that around one-quarter of Facebook reach is unique and cannot be reached by a TV campaign. And around 13% of TV viewers are unique and cannot be reached by Facebook. This is valuable information in the absence of access to single-source media mix planners, and particularly helpful when planning a multi-platform buy. Any addition of a media type to the media mix will, to an extent, simply add exposure frequency to the campaign, rather than building additional unique reach.

It is upon this knowledge that marketing effectiveness scholars advise advertisers to buy the largest media available for their budget (to maximise reach).

But ad fraud changes everything.

8.2 The Practical Reality

Let me give you one truth. If you added up the ROI metrics that are espoused by many, many publishers, many, many data providers, the U.S. GDP would double every six months. There's so much BS in the marketplace.

Steve Hasker, Chief Operating Officer, Nielsen

8.2.1 Big Media May Not Be Big

I promised to describe who you should impress from a theoretical perspective, and I have.

A brand needs to focus on reaching as many category buyers as possible, rather than hyper-targeting any single (reportedly relevant) demographic group, or buying segment.

The statistical laws that underpin a media audience should help an advertiser understand where to find these category buyers, but in 2020 all bets are off. Sweeping statements about *buying big media* are not relevant in this landscape. While we see that the Duplication of Viewing and Double Jeopardy patterns are still evident in our data, our sample is experimentally controlled to expose real humans to real ad impressions in real viewing environments, 100% of the time. This is not the reality of the online video market.

Today there is a flourishing business in click farms, ad stacking, duplicate accounts, fake accounts, fake views, fake subscribers, fake shares, fake followers, fake influencers, fake ads, cookie stuffing and fake things we haven't heard of yet. And this brings us back to the half empty packet of biscuits. This means that buying reach from big online media, but not knowing how many impressions are real, might not actually deliver any unique viewers at all—depends on the luck of the distribution that lies beneath (which a marketer will never know).

REMEMBER THIS SIMPLE TRUTH

Buying reach from big online media, but not knowing how many impressions are real, might not actually deliver any unique viewers at all.

In terms of fake and duplicate accounts even Facebook struggles to report the scale of the problem, stating in a securities filing in October 2018 that, 'Duplicate and false accounts are very difficult to measure at our scale,' and the actual numbers, '...may vary significantly from our estimates'. When

New York Times reporter Jack Nicas asked Alex Schultz, Facebook's Vice President of Analytics how advertisers felt about paying to show ads to fake accounts, Mr. Schultz said, 'What advertisers need to feel comfortable about are the actual results generated by our ad campaigns'.

An interesting take from Facebook, but not knowing what reach you are getting for your money is like walking into a car dealership with a blank cheque and a cheesy salesman saying, 'Trust me little lady all you need to know is that your dream car drives, you don't need to know what's under the hood'. This feels like what many of the major platforms say when questioned about their inner workings. In Australia in 2018, when the Government-mandated Australian Competition and Consumer Commission (ACCC) asked for a response from the digital platforms to complaints raised against them in the Digital Platforms Inquiry (see Chapter 1), the Chairman of the ACCC said the response from the 'dominant digital platforms' might be best described as a 'trust us' reply.

On fraud more specifically, the World Federation of Advertisers (WFA) in their 2017 ad fraud report, talk about the industry as having deep structural issues of which they suggest will likely get worse with a 22% year-on-year growth for fraudulent bot traffic. They suggest that bots inflate monetised audience by 5% to 50% and report the scale of the problem to be quite substantial:

- 88% of digital ad clicks deemed fraudulent
- bot traffic is up to 61.5% of all website traffic
- 40% of mobile ad clicks are essentially worthless
- more than 18% of impressions come from bots.

A team from the University of Twente in the Netherlands wrote a paper in 2018 describing the business model of a botnet (fraud network), suggesting that botnets, in particular click fraud, are a hugely profitable undertaking for those who are successful. The team predicts profit per month for a syndicate can be in excess of US\$20 million. In 2019, Dr. Augustine Fou, a cybersecurity and ad fraud researcher, wrote about research cases where all of the sessions from a particular website or platform were turned off, yet there was no change to the goal events recorded (i.e. impression completions). Meaning, that none of the goal events were driven by visitors from that source, they were bots. He suggests that brands who are treating digital as a reach in frequency medium, are being duped in that most ad impressions across display ad and video, and mobile ad impressions are made up.

It's important to note that ad fraud is an internet thing, not a platform thing, so TV is not immune. As the future of TV moves to over-the-top (OTT) services, where video content is served via the internet rather than the traditional closed television system, ad fraud will become more apparent. OTT ad fraud is reported to sit at about 19% globally at the moment and is on the rise (Picalate, an MRC accredited OTT invalid traffic detection company, 2018).

REMEMBER THIS SIMPLE TRUTH

Ad fraud is not a Facebook, Google, Twitter thing—it is an internet thing and TV is not immune as it moves towards OTT.

Despite all of this, of the reach that does hit a real human, the value of those reach points is diminished by the nature of the platform's ability to deliver appropriate viewability (as per Chapter 5). So, when we say that one-quarter of Facebook reach is unique to that of TV, which on the surface seems a decent advantage, the likelihood of that 25% being: (a) seen by a human consumer, and (b) truly unduplicated, and (c) of a high viewable delivery, is extremely low. So, it would seem that any apparent advantages of gaining unique reach from the bigger online platforms are seriously watered down by the reality of what lies beneath.

REMEMBER THIS SIMPLE TRUTH

Sweeping statements about *buying big media* are out of touch in this landscape. When a platform is twice as big, but a reach point delivers half the pixels to half the humans, half of which are duplicate accounts, any value in being *big* is cancelled out.

8.2.2 Coming Full Circle

Given its relationship to penetration, reach is vital. And reaching many category buyers through purchase-based targeting, where purchase data is used to build look-a-like consumer segments for targeting close to the purchase occasion, might be the holy grail. But when the platforms that have the greatest capability to roll out look-a-like targeting are the greatest culprits

of poor and/or fraudulent ad delivery, it poses a BIG problem for finding where category buyers are hiding.

Until a silver bullet, or maybe an anti-bacterial wipe, is applied to our industry to clean up online inventory, a new parameter should be applied in the media buy—*reach quality*. Only after reach quality per thousand impressions is assessed should traditional parameters, such as unique reach, overall cost and cost to target market speed of delivery (accumulating reach), be considered.

In terms of quantifying reach quality, we look to our own research on reach quality, the WFA ad fraud guidelines, Dr Fou and some in-the-trenches platinum-level advertisers, for a baseline list. It's a list that covers media factors only; things about the delivery of the reach point that make the impression valuable. It does not include considerations of viewer behaviour (such as, rate of engagement, scroll speed, conversions, time spent viewing) or other campaign factors (such as, relevance, targeting ability, creative restrictions, ad placement or brand safety). You may have noted that many of these were discussed in the qCPM section of Chapter 5. For quality reach, common-sense parameters might include:

- % pixels on screen
- # seconds in view
- % screen coverage
- % ad clutter
- % sound on
- % likely human impressions (fraud estimation counts)
- % account/viewer duplication.

The WFA suggests that advertisers demand full transparency from the media owner on likelihood of human impression and account/viewer duplication, not simply accept what is available publicly. Additionally, Dr Fou calls out to advertisers to run their own #turnoffadtech experiments to ascertain the level of traffic that is fraudulent. That's right, he's suggesting that advertisers should cut budget for a period of time to see how goal events change. If there is no change, that is telling. Also build a white list of accepted sites (those who supply transparency, tick the brand safety requirement and are verified by IAS, DV, MOAT, etc.), and stick to these.

QUICK EXPLAINER

World Federation of Advertisers (WFA)

WFA is a global not-for-profit organisation representing the common interests of client-side marketers (not agencies, media owners or vendors). Its global membership represents roughly 90% of all the global marketing communications spend, almost US\$900 billion annually.

Founded in Italy in 1953 the WFA is based in Brussels, Belgium and has offices in London and Singapore.

WFA helps its members to improve the effectiveness and efficiency of their marketing communications through benchmarking and the sharing of knowledge, experiences and insights. It provides a unique global network of marketers who help each other navigate the fast-changing marketing landscape.

It also champions and defends marketers interests, helps set standards for responsible marketing communications worldwide and encourages leadership initiatives, which go beyond compliance with existing industry standards.

8.2.3 The Wrap up

Quality reach is out there, it's just harder to find than it used to be and it is not simply going to be handed to you by the biggest media. But quality reach is worth paying for and it can pay dividends both in terms of ROI and brand growth. As the industry evolves and AdTech is called to account, quality CPMs will become more advanced. And the day when $q = (\text{real})$ quality, the ground advertisers have lost will slowly be reclaimed.

MEANWHILE IN THE REAL WORLD

When machines decide the bubbles, Peppa Pig pays the price

Online behavioural advertising, or more specifically the targeting technology that uses past behaviour to infer targeting options, operates in a filter bubble. It is based on a machine learning algorithm that may be accurate at one point in time, but over time can become separated from its source point reality. And it can go hilariously wrong.

In 2017 IAG, Australia's largest general insurer, underwent an attribution project which included a series of media experiments to understand advertising ROI for each marketing channel. One of the experiments revolved around understanding the causal impact of retargeting. Matthew Daniell, IAG Effectiveness Lead, told audiences at a Mumbrella 360 event in Sydney

(2019) that what they found (by accident) was weird, hilarious and scary all at the same time. According to the DSP, the most over-indexing audience trait compared with IAG buying data was...nappies. Not 'In-Market for Car Insurance', not 'In-Market for Home Insurance', or any car/home related targeting, but nappies. Yet according to the same buying data, 60% of their customers are not parents.

Matthew went on to explain that while car insurance signals might start out as 'searching for a car', the pool of signals collected on relevant sites is small. But brands need reach to grow, so to increase audience numbers to acceptable levels of reach, a look-a-like algorithm takes characteristics from what it perceives as similar groups of people. Problem is, sometimes the larger audience display unrelated, but dominant, characteristics (like nappies) and this is when things can go bad. This is what happened for IAG and their ads ended up as pre-rolls on Peppa Pig, Paw Patrol and Toy Unboxing. For IAG, every ad that is served against a kids' video is wasted money.

Most data brokers have secret black-box systems, so these mistakes are hard to uncover, and even more difficult to rectify. Matthew questions, at what point does behavioural targeting go from an insight to a useless data point. How often do we have faith that these audiences are real? And how often are targeting options not checked? IAG spend a great deal of time creating strict placement and topic blacklists, but it is a never-ending task and not always adhered to. He says there always seems to be somewhere in the supply chain that can get around these lists.

Bob Hoffman, Ad Contrarian, says: Technology without wisdom is just an elevator without buttons.

Matthew Daniell, IAG, says: I would rather know which floor the elevator will stop.

I say: *When you have to black list Peppa Pig, something is clearly wrong.*

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