

Introducing Evidence-Based Metrics



A guide from
Adelaide and the ANA

At its core, the scientific method proves or disproves a hypothesis using empirical evidence obtained through systematic observation, measurement, experiment, and documentation of patterns and behaviors.

While the scientific method is most commonly associated with STEM fields, it has transformed countless business models and industries—finance, sports, and architecture, to name a few—by providing a framework to better understand quality and how it fuels performance.

In the media measurement space, evidence-based metrics put the scientific method into practice, prioritizing fact-based measures of media quality and advertising performance.

Moneyball: The Art of Winning an Unfair Game by Michael Lewis (and the 2011 film adaptation starring Brad Pitt and Jonah Hill) explored the story of how an evidence-based approach to baseball stats called “sabermetrics” upended the game.

Image source: Moneyball, Columbia Pictures



The Evidence-based Movement in Marketing

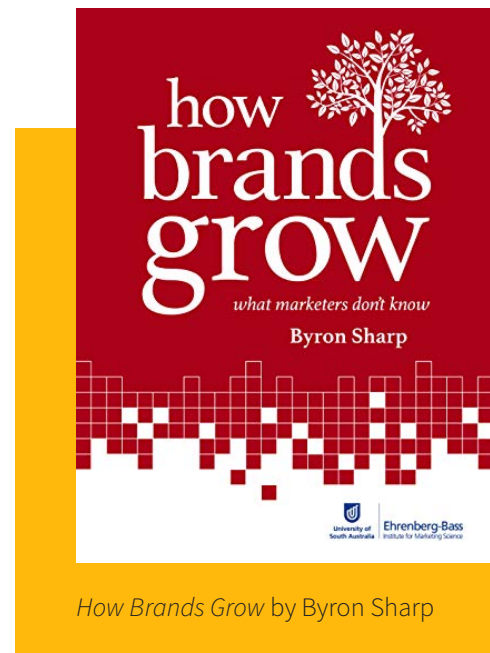
The evidence-based movement in marketing has been percolating since the 1970s when Colin McDonald began studying the short-term effects of advertising, and Simon Broadbent, out of Leo Burnett London, laid the groundwork with their thinking around accountable advertising.

Byron Sharp's *How Brands Grow*, published in 2010, presented several evidence-based scientific laws of marketing. He is carrying the torch passed from statistician and marketing scientist, Andrew Ehrenberg, and marketing research academic, Frank Bass. In 2005, The University of Australia in Adelaide (our namesake), paid homage to both thought leaders by building the Ehrenberg-Bass Institute for Marketing Science, whose curriculum was based on their research.

Also notable is the work coming out of IPA's EffWorks led by Les Binet and Peter Field, who leveraged evidence-based methods to study the thousands of advertising campaigns housed in the IPA Databank.

To date, the evidence-based movement in advertising has been focused on proving laws or strategies rather than evaluating the currencies advertising professionals use to transact on media. These common currencies, or metrics—CPM, CPC, and CPV, for example—are largely driven by industry consensus rather than scientific evidence.

Only in the past few years has the rise of attention measurement brought evidence-based thinking to the forefront of media metrics. And as evidence-based approaches continue to gain momentum, it's exciting to think about the positive effects they will have not only on advertisers, but on the advertising industry as a whole.



Why Are Evidence-based Metrics So Important in Media?

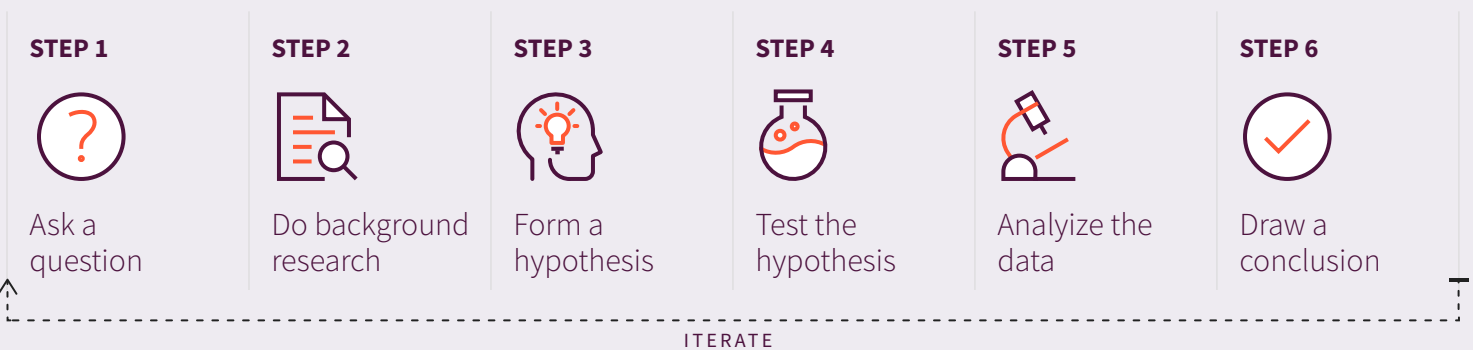
Metrics, especially those used as currency, are the substrate of markets—they create incentives for buyers, sellers, and middlemen, and their accuracy sets risk tolerance and creates, or destroys, demand for entire product categories.

A good set of measures and rules creates the perfect environment for a market to flourish. Unfortunately, this isn't the case in digital advertising. Most advertisers rely on metrics like viewability, completion rate, and brand safety to determine digital media quality. Metrics that have been proven not to be connected to business outcomes.

When metrics aren't connected to quality, bad things start to happen to markets. In digital advertising, the market has reverted completely to real-time spot purchases, and advertisers have become fixated on attributing every impression to an outcome. Left unchecked, bad metrics will create a lemon market, and the sellers of quality goods will exit as prices decline.

On a tactical level, the consumer privacy movement is slowly breaking down advertisers' abilities to connect ad exposure to purchases or shifts in attitude. This creates an urgent need for more accurate evidence-based metrics, as attribution acts as a crutch for poor metrics.

EVIDENCE-BASED: THE SIX STEPS OF THE SCIENTIFIC METHOD



Classically presented as a six-step process, the scientific method can be adapted to fit specific fields of study. For Adelaide metrics, we adjusted this process to three stages. (See [How We Built an Evidence-based Media Quality Metric](#), below).

Applying Evidence-based Techniques to Media Metrics

So how do we adopt metrics founded in evidence? It's less complicated than it seems. Evidence-based metrics are simply those that have been proven, based on controlled experiments, to predict the outcomes that advertisers want.

There are three vectors along which media is typically measured, and here's how they can be adjusted to take an evidence-based approach:



QUALITY

Media quality metrics should be strongly predictive of outcomes. Given how much audience and creative impact outcomes, experiments should be designed to hold both stable. From these experiments, advertisers can identify foundational attributes of media that act as proxies for quality. At Adelaide, we use attention metrics as the underpinnings of our media quality models.



FRAUD

One evidence-based approach to fraud detection is to partition media by marketplace and publisher, and sample between 5–10% of impressions to determine the cleanliness of each combination. Then stop buying from high-fraud environments as they don't change much.

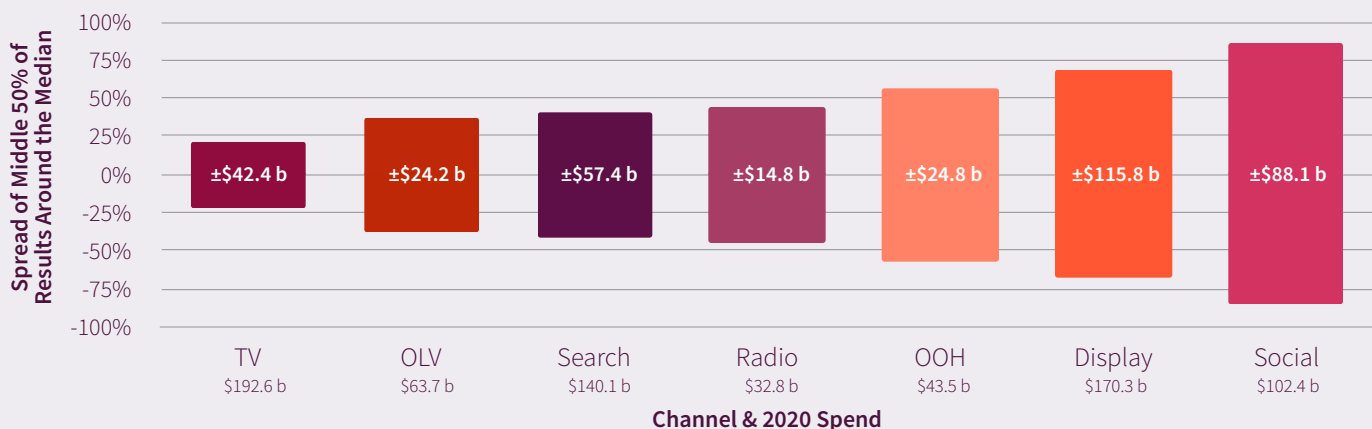


SUITABILITY

It's important to state this clearly: there has never been empirical proof that advertising next to news on a premium publisher is detrimental to a brand. An evidence-based approach to brand suitability will look at relative long-term impacts of advertising on different types of content and adjust price based on that data, likely very little outside of environments that aren't suitable for a specific brand.

THE VARIABILITY OF RETURNS BY CHANNEL

When quality varies greatly, so do outcomes.

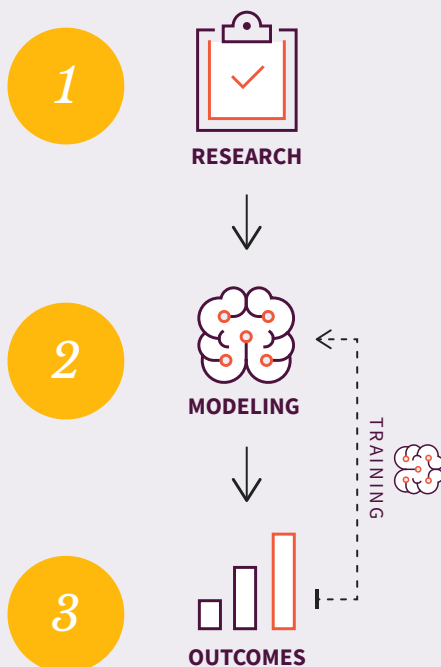


Sources: MediaCom/Wavemaker/Gain Theory, eMarketer

How We Built an Evidence-based Media Quality Metric

At Adelaide, we set out to create a metric that measures the quality of media placements. It's commonly understood that the job of media placements is to deliver attention to creative. We developed a three-step process to measure how this attention delivery occurs.

EVIDENCE-BASED METRICS: A THREE-STEP APPROACH



STEP 1

We researched the various factors of media that drive attention, and the subsequent incremental impacts on business outcomes. Why attention? There is a growing body of research that pointed us in that direction. Dr. Karen Nelson-Field and others have shown that placement attributes can predict the attention they are likely to receive—and the impact of that attention on outcomes.

STEP 2

Next, we built a model that used rough estimations of the impacts of each of the factors discovered by researchers. The model scores the quality of placements with a single, easy-to-use metric.

STEP 3

Over time we fed our model additional data to improve it and began to train it with outcome data. It got smarter, and as it got smarter it began to proxy outcomes more closely. This is the scientific method coming to life, testing different hypotheses about which measurements of media is more accurate.

Impacts on Media from Evidence-Based Measurement

The scientific method has reworked the incentive model of every market that it has touched for the better. From professional sports to finance, it has left a trail of evidence-based disruption—promoting quality goods, rewarding innovation and increasing transparency.

In media, we hope that evidence-based metrics will give advertisers reasons to pay more for quality, creating a positive feedback loop that can begin to undo the damage wrought by decades of inaccurate measurement.

ABOUT ADELAIDE

Adelaide provides evidence based omni-channel measurement of placement quality. We primarily use attention metrics when constructing our measures and train our model to predict outcomes as accurately as possible.

Adelaide

622 Greenwich Street
New York, NY 10014

info@adelaidemetrics.com



155 E 44th Street
New York, NY 10017

212.697.5950