

## **Feedback from the front lines:**

### **New data on effectiveness outside award winners**

Dr Grace Kite and Paula Gonzales, October 2021

#### **Summary of Findings**

- Advertising works – even unawarded advertising returns on average £3.80 in revenue per £1 spent.
- Online channels deserve their place in the media mix. The optimum share of budget to spend online is between 40 and 50%.
- Effectiveness has been increasing over the past 5 years and is now at similar levels to what we saw in 2005. If there was a general crisis in effectiveness it is now over.
- In the period that RROIs have been increasing there has been significant experimentation and evolution in online channels being used. This is likely a part of the reason for improvement in overall RROIs.
- IPA award winners are different. They return 3 times as much revenue per £1 spent, that's £9 more. Within categories IPA winners typically return 2 to 4 times as much as unawarded campaigns. This means there is an important opportunity for front line brands to learn from IPA award winners.

#### **Introduction**

This year magic numbers, supported by IPA effworks global, began an initiative to collect together marketing effectiveness analysis results from campaigns that didn't win awards.

The intention is to learn from what we, the advertising industry, know about effective marketing, so that we can achieve stronger outcomes for our clients and together play a leading role in economic success.

In this first year we collected together results of econometric models (also called market mix models) that produce return on investment analysis for advertising. We only collected data on UK businesses, and we asked for cases where the middle year of the evaluation was 2005 or in the 5 years between 2016 and 2020. In future years we will add new cases, expand the scope content-wise, and add more countries.

This year, with the help of IRI, D2D, OMG, WARC, and magic numbers we collected more than 500 cases. Of those, 403 were fully populated and fully evaluated, either by IPA award

entrants whose efforts were judged to be robust by the judges, or by specialist econometricians working for our contributing companies. In addition to these “full rows”, we collected an additional 75 partially populated cases for 2005. Details of the sample are available in the appendix. We called our database ARC21

Some caveats and considerations:

- Advertising effects here take into account carryover effects visible in modelling, but not very long-term effects. They don't include the impact of advertising on ability to charge price premiums, or permanent changes to sales caused by campaigns.
- The assumption underlying the work is that researchers on the ground used their best judgement to choose appropriate methods with which to evaluate the specific advertising at hand. This does mean that methods used are different across cases in ARC21, but it also avoids using a one-size fits all approach which might miss important nuances in a given situation.
- We have focussed on what affects revenue return on investment, but this isn't the only measure of effectiveness and ROI has been criticised, quite fairly. We advise readers to be aware of these critiques<sup>1</sup>
- Because the ARC data is comprised of results from econometrics, it is not representative of all advertisers, but rather those that spend enough to make it worth the cost of an econometric evaluation (typically £25k+)

This document contains the detail behind findings in a presentation for Effworks 2021. It's been peer reviewed by Sally Dickerson (OMG), David Wright (IRI), Steve Cookson (D2D), Paul Dyson (accellero) and Matt Hill (Thinkbox). It is shared in the spirit of full disclosure so that colleagues can have confidence in the findings presented, and also understand the weaknesses.

## **01: Advertising works**

It is worth beginning with a confirmation that our database, which includes proper evaluations of £5bn worth of advertising spend and 343 non-award-winning cases demonstrates that advertising is typically successful.

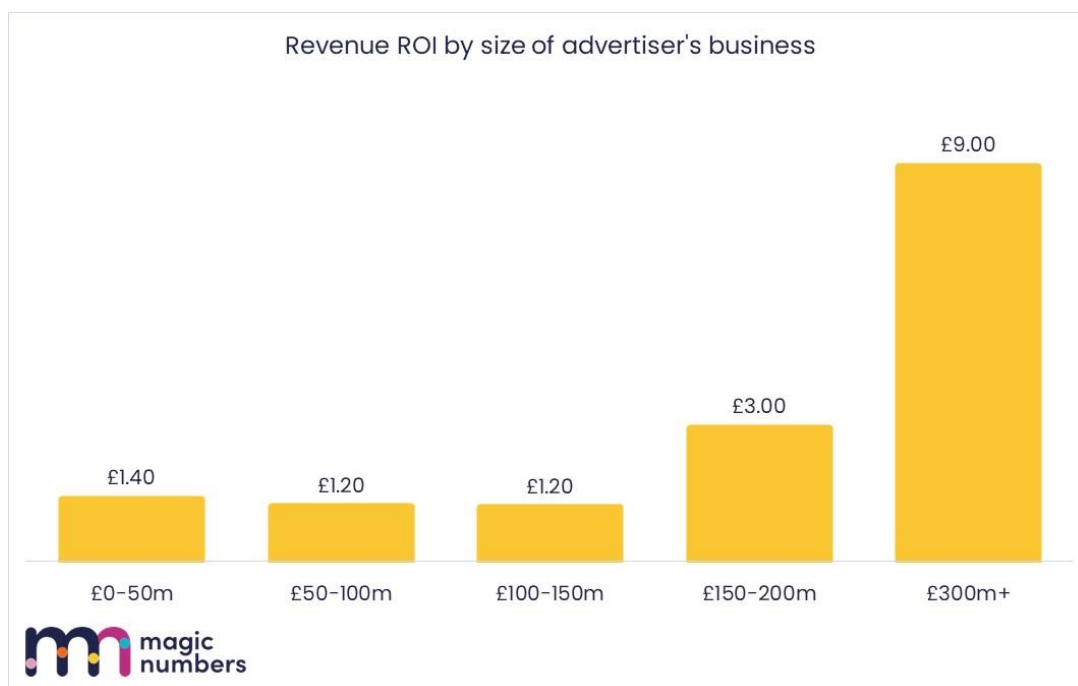
Even in cases that weren't submitted to any award, the average revenue return on investment was nearly £3.80. Likely to be profitable for all but those with the slimmest margins.

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<sup>1</sup> For example, this contribution by Tim Ambler of London Business School  
<https://www.warc.com/fulltext/Admap/79369.htm>

## 02: Brand size matters

As expected,<sup>2</sup> revenue return on investment (RROI) increases with the size of the advertiser's business. We estimate that an advertiser that earns £50m more in total turnover per annum receives on average c.40p more revenue per £1 spent on advertising.



Note: Chart covers 343 cases not entered into an award evaluated by our contributors using econometrics. There are between 17 and 92 cases in each bar.

So that we could be sure our findings were not driven by the size-make up of advertisers that do different things, we set out to create size corrected RROIs. We believe ARC21 is the first data source of this kind big enough to enable size-correction.

The table below shows a simple regression with revenue ROI as the dependent variable, and advertiser's size (turnover) and category dummy variables as explanatory variables. The relationship between size and RROI is very clear in this regression, and this is the basis we've used for correcting for size.

Our size-corrected RROIs reported through the remainder of this report subtract 8p from the raw RROIs for every £10m of an advertiser's annual turnover.

Dependent variable is RROI

Regression includes 343 cases not entered into any award

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<sup>2</sup> Dyson, P and Weaver, K (2006) "Advertising's Greatest Hits" Admap

Variable	Coefficient	p-value
Constant	2.65	0.00
Advertiser's turnover (£m)	0.008	0.00
Dummy = 1 if FMCG	-2.29	0.00
Dummy = 1 if communications	-5.51	0.13
Dummy = 1 if ents	1.95	0.00
Outlier case 465	190.5	0.00
Outlier case 535	76.2	0.00
Outlier case 408	52.2	0.00
<b>R-squared</b>	<b>90%</b>	
<b>Prob(F-statistic)</b>	<b>0.00</b>	

Note: Advertiser turnover was collected in buckets and has been "un-bucketed" using the midpoint of each bucket. Outlier dummies correct for 3 extremely large RROIs which are unlikely to be helpful in forecasting future returns to other advertisers. Results for size are not materially different if the dummy for communications is excluded from the regression.

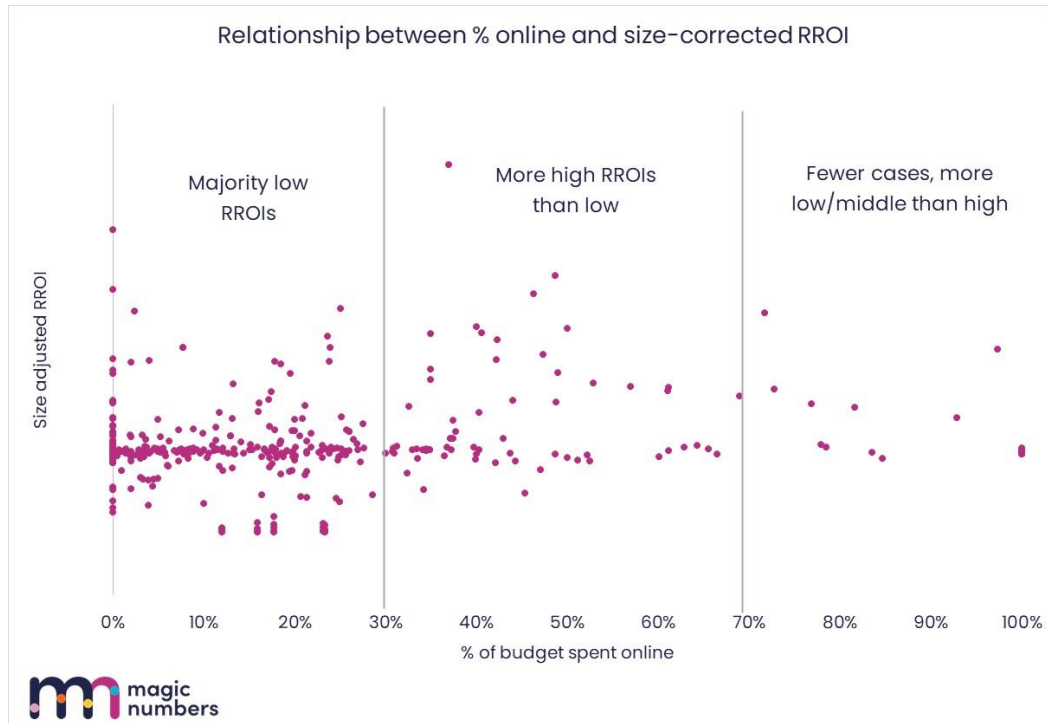
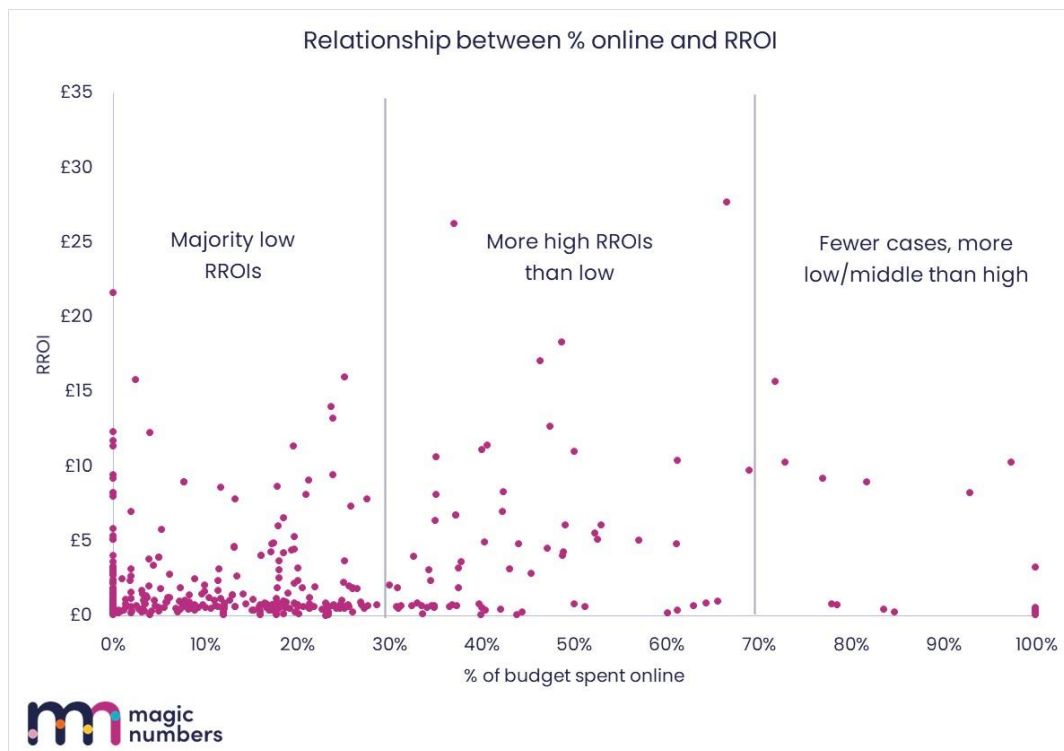
### 03: Online is not the enemy of effectiveness

ARC21 includes very good data on % online and RROI, with online being comprised of search, display (video and static), YouTube and paid social. Broadcaster VOD is not included in online, as most of the research community classify it as a form of TV.

The charts below are cross plots of the 2 measures, with each blob representing a case in the database. The top panel presents raw RROIs and the bottom panel, size adjusted RROIs.

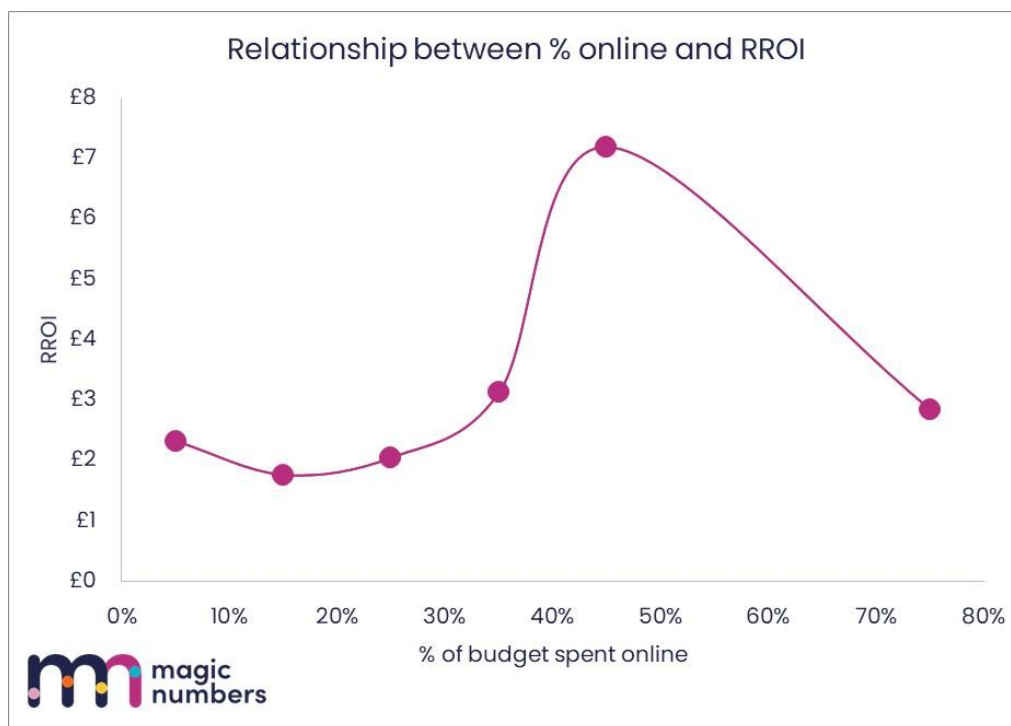
The relationship between these two metrics is noisy, which likely reflects the fact that the right thing to do in terms of online/offline mix is context sensitive. Different businesses get different benefits from different media mixes.

Having said that, it is clear from the chart that more brands with low RROIs have a low percent spent online, and there are more high RROIs in the middle third of the chart.

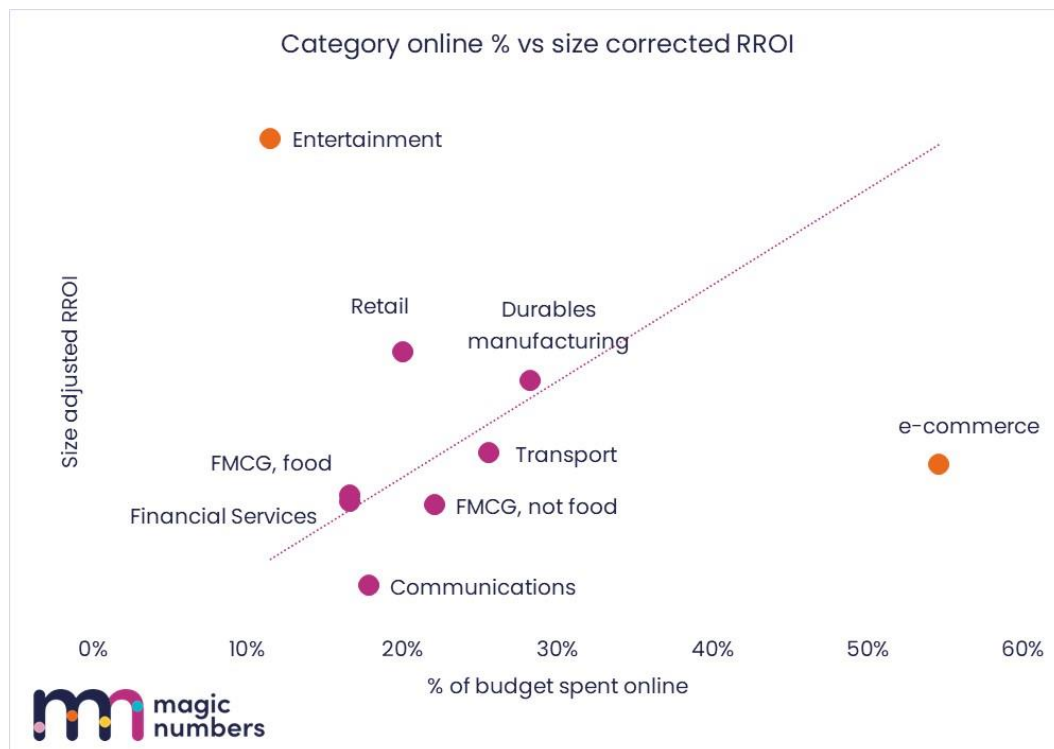


Note: 343 cases evaluated using econometrics by our contributors. Size correction is raw RROI – 8p per £10m of advertiser's annual total revenue.

The relationship is more clearly visible in the chart below which presents the raw RROIs bucketed so that each node now represents between 13 and 134 cases. The highest RROI interval is 40–50% online.



Note: Unadjusted RROI in 343 cases evaluated using econometrics by our contributors. Buckets are 0–10%, 10–20%, 20–30%, 30–40%, 40–50% and 50%+ spent online and have been plotted at the midpoint of each interval. The location of the optimum % online is not changed when this chart uses size adjusted RROIs.



Note: 343 cases evaluated using econometrics by our contributors. Size correction is raw RROI – 8p per £10m of advertiser's annual total revenue. Between 9 and 97 cases in each blob, except e-commerce with 4.

The chart above shows how the same relationship plays out across categories, this time using size-adjusted RROIs so that categories can be compared on an equal footing. The relationship depicted in pink shows clearly that for the range 0–30% spent online, category RROI increases with budget allocated online.

Entertainment (in orange) is treated as an outlier here because the 13 cases are dominated by a couple with very high RROIs which we suspect benefit from certain businesses having very long customer lifetimes included in the ROI calculation. e-commerce has also been treated as an outlier because there are only 4 cases, which is not enough to conclude anything.

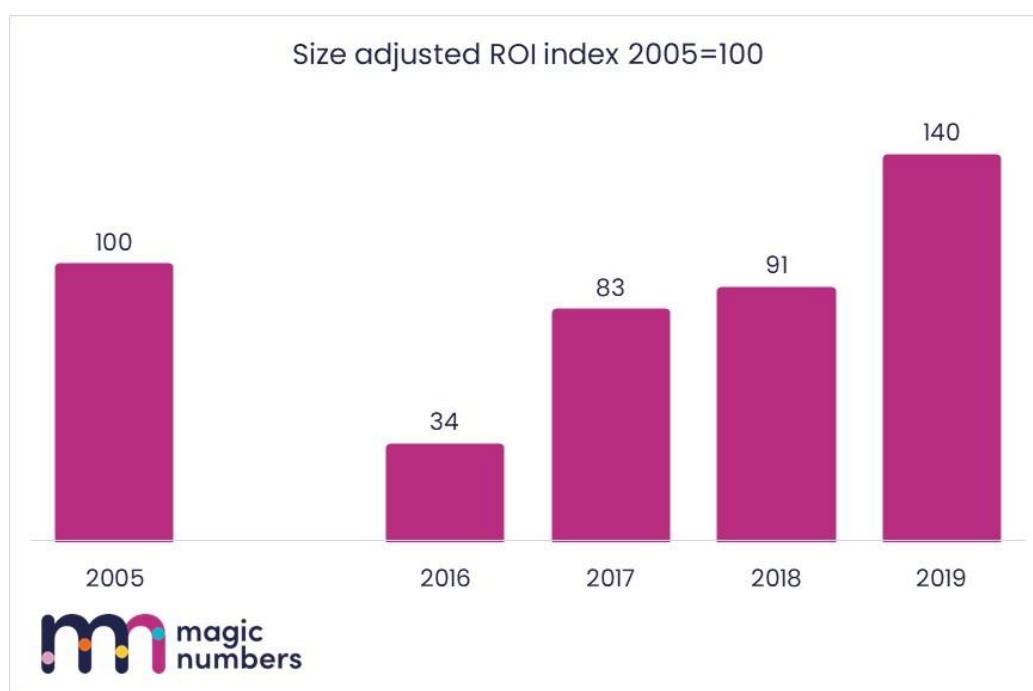
#### 04: Returns to advertising are on the up

In 2019 Peter Field identified a “crisis in creative effectiveness”<sup>3</sup> as measured by a falling number of large business effects being reported in IPA awards entries. His hypothesis as to why this might be occurring was an over-investment into short-term activation-focused activity online. Since then, there have also been explanations about the content of ads

<sup>3</sup> Field, P (2019) “The crisis in creative effectiveness”, IPA

themselves<sup>4</sup> and about advertisers' increasing need to devote budget to online signposts which don't bring incremental sales<sup>5</sup>.

ARC21 data offers an opportunity to assess whether effectiveness has been falling outside of IPA award entries. And, if that is indeed the case, to begin to dig into why it might be happening.



Note: In this section an additional data source for 2005 has been added to the ARC data, so that it includes 418 un-entered cases evaluated using econometrics by our contributors. 44-139 cases in each bar. 2020 is excluded here because data collection took place in 2021 and only 15 cases are available.

What the data shows – in the chart above – is a quite significant fall in size-adjusted RROIs between 2005 and 2016, and a recovery thereafter. This picture is clearly visible once RROIs have been adjusted for size, but without the adjustment, it is masked because the size-mix of businesses is changing over time too.

It's important to remember that 2016 was the year of the Brexit vote in the UK, and that RROIs that year may have been impacted by the extreme uncertainty and disruption that the vote presented to UK businesses. If we were to consider 2016 as an outlier, a possible read from the chart above is that there was no crisis outside award winners after all.

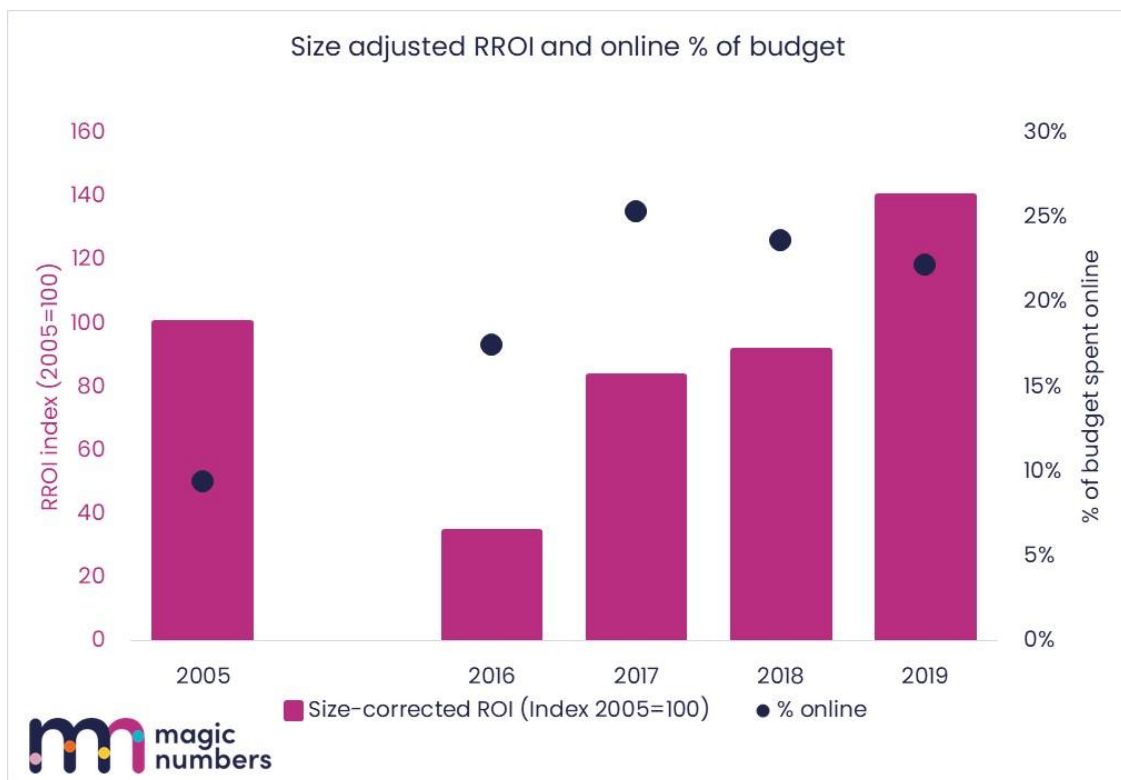
<sup>4</sup> Feldwick, P (2021) "Why does the pedlar sing? What Creativity Really Means in Advertising", Matador; Wood, O (2019) "Lemon. How the advertising brain turned sour", IPA

<sup>5</sup> Kite, G (2020) "Is online advertising the new rent?" WARC



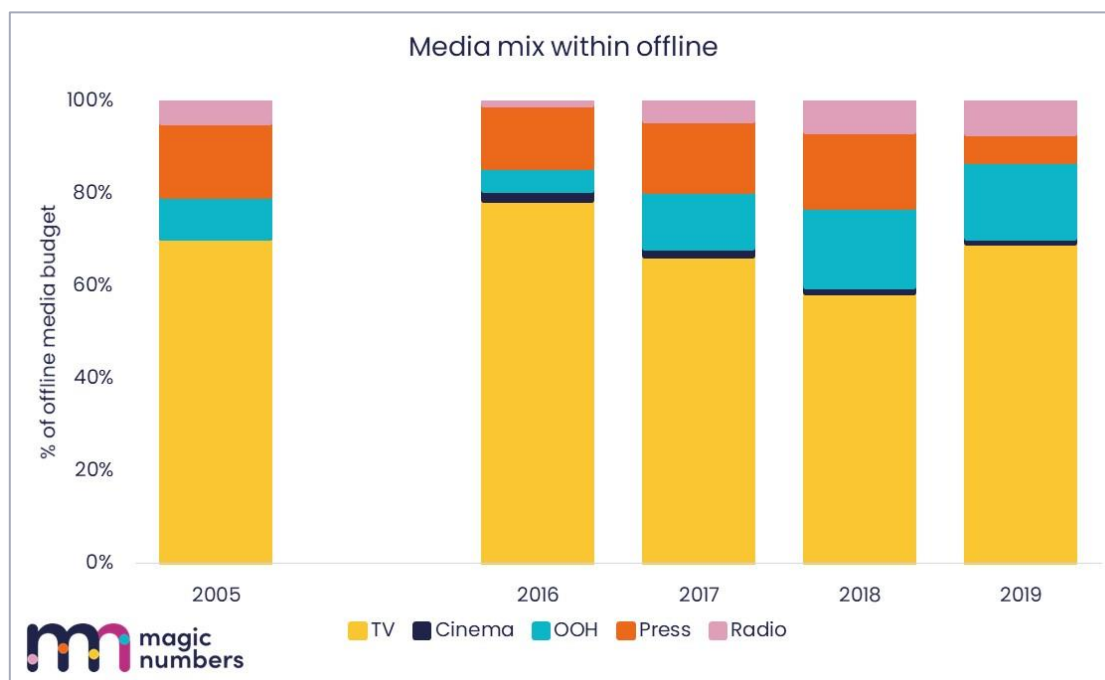
An alternative interpretation is that 2016 was a low RROI year because the crisis was still happening at that time, but since then that the crisis has abated.

To dig into possible causes of changing effectiveness, the chart below plots RROI and % spent online in the ARC data over time. It shows that between 2005 and 2016 the % spent on online channels stepped up a lot. But what's also clear in the chart is that, RROI was increasing between 2016 and 2019, while the % online was stable.

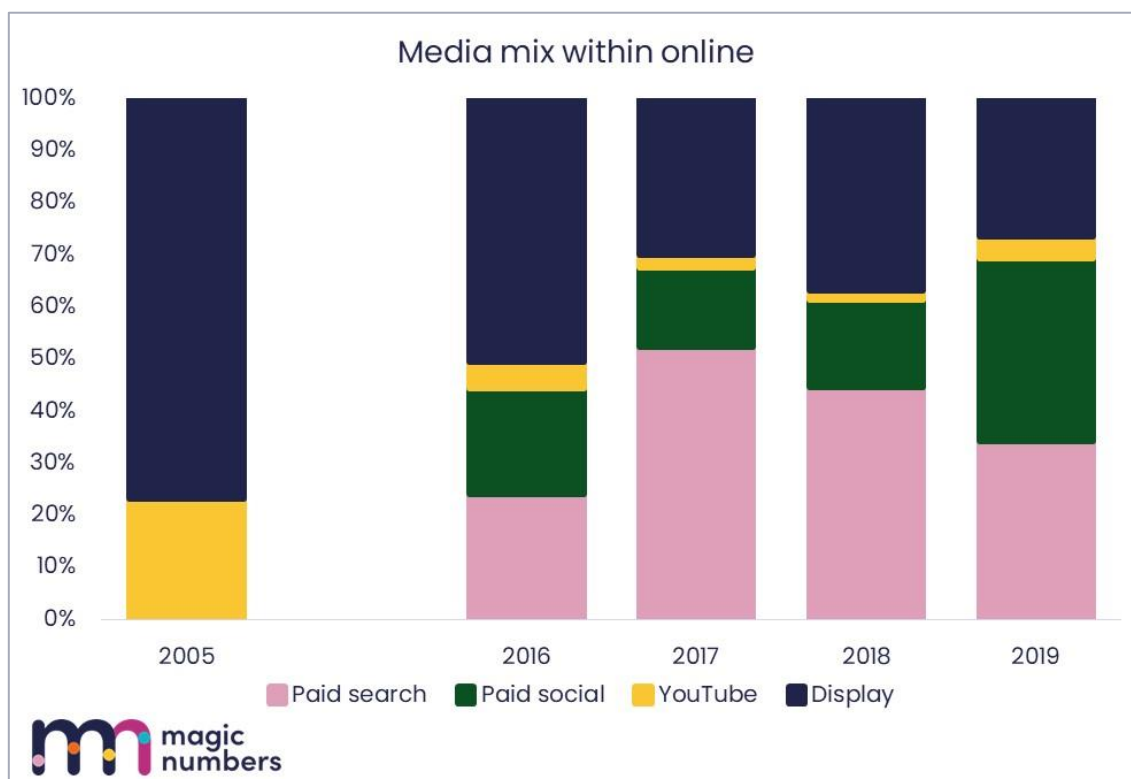


Note: 418 un-entered cases evaluated using econometrics by our contributors. 44-139 cases in each bar. 2020 excluded for lack of enough cases.

An obvious question to ask is which offline channels have lost out in the media mix as online percent grew and/or as RROI was growing later. On this there is no clear pattern, with all years in the chart below showing a mature use of offline channels. TV makes up around 2/3 of offline spend, and OOH, press and radio make up most of the rest in fairly consistent proportions.



Note: Average % of budget for each channel rebased so that total offline is 100%. 418 cases in all, 44-139 cases in each bar. 2020 excluded for lack of enough cases.



Note: Average % of budget for each channel across cases rebased so that total online is 100%. 418 cases in all, 44-139 in each bar. 2020 excluded for lack of enough cases.

Within online, however, there are some very clear shifts going on. In 2005, nearly 80% of online spend went on display, versus 50% in 2016 and only 25% in 2019. The chart above also shows that PPC was the first channel to gain share from display, whereas in 2019, our most recent, and highest-RROI year, social and PPC were even at c.35% of the online budget each.

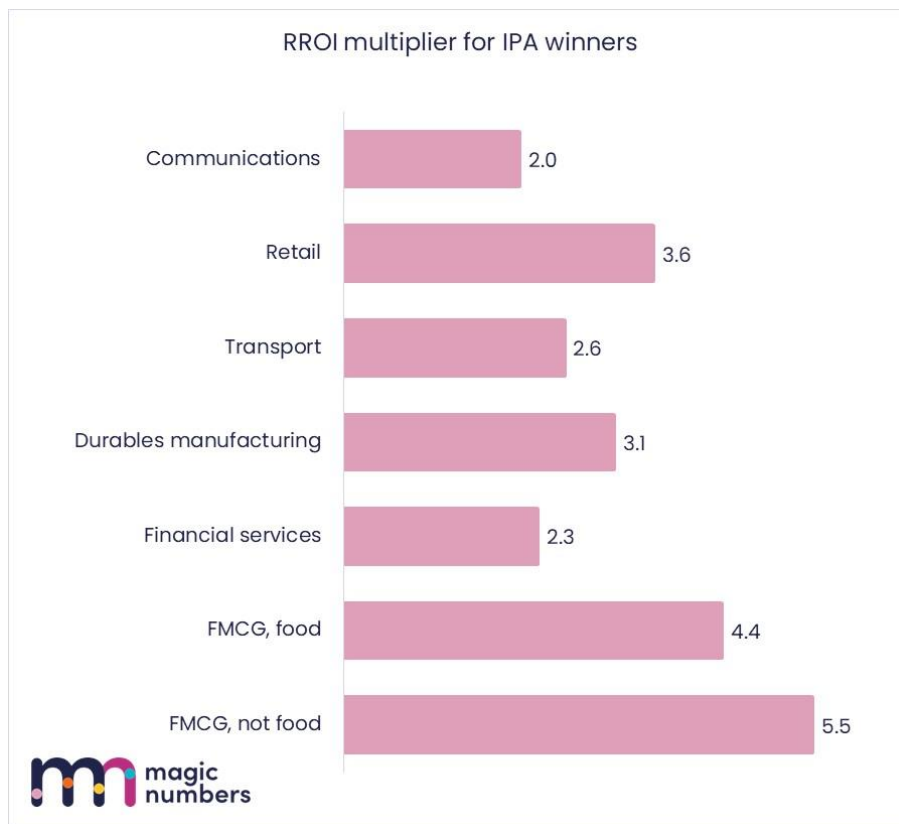
While this dataset is not fully conclusive on the issue of whether there has been a more general crisis of effectiveness, we favour the explanation that effectiveness has been in flux. Based on this dataset and our own experience we believe that in the last 15 or so years, a lot of experimentation has been taking place, and that, in the last 5 years the experimentation is starting to come to fruition so that we're now seeing a more mature use of the newer channels, and so better RROI.

### 05: Award winning ads bring higher returns

It's clear in the data that IPA award winning advertising is better at driving sales than the typical campaign. On average, IPA winning advertising returns c.£9 more revenue per £1 spent than unawarded advertising. It's more than 3 times more effective.



Note: 66 IPA award winners and 343 cases evaluated using econometrics by our contributors.



Note: 66 IPA award winners and 343 cases evaluated using econometrics by our contributors. There are between 10 and 105 cases in each bar.

The same pattern holds within categories. IPA winning revenue ROIs (RROI) are considerably bigger vs unawarded cases in all categories except entertainment, which we believe is an outlier. In fact, in most categories, RROIs are at least double the size of RROIs for unawarded cases. In FMCG, awarded advertising returns 4-6 times more.

## 06: In conclusion

The internet has – without a doubt – made reaching people with a direct message cheaper than it was before. Direct mail costs between 50p and £5 per item sent even without buying opted-in addresses, and most senders would be very pleased with a 10% response rate. By contrast, most of the online channels available to advertisers today cost 50p-£5 for an actual response. Once you also recognise that online channels are capable sometimes of brand building too, it's not surprising that some of the biggest RROIs in ARC21 are where businesses spent 40%-50% of their budget on these channels.

Our conclusion is that since these channels became available, advertisers have been undertaking a process of learning by doing. Businesses in the ARC sample switched budget

away from mature channels that they knew how to use and how to mix, in favour of experimenting with online channels.

Judging by the ongoing sweeping change in online media mix in the past 5 years, it seems that this experimentation hasn't yet reached full fruition. The chart points to more change in media-mix to come even without looking at more detailed subsets like PPC by brand vs generic, and display by prospecting vs re-targeting<sup>6</sup>, or considering advances in creative in online channels. This bodes well for effectiveness going forward. There is a clear upward trend in size-adjusted RROIs in recent years, and it may well continue.

That said, readers who are impatient for this process of experimentation to yield faster improvements in effectiveness have every right to be. We've been advertising on Google for more than 20 years, and on Facebook for more than 15, it's a very long time for test and learn.

As an industry we need to make more effort to come together, share knowledge, and publish findings. Only then will we be able to accelerate the process of improving effectiveness.

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<sup>6</sup> These are questions we will have to return to in future years as not all of our contributors report this split and cases to analyse are limited.

## 07: Appendix

Table 1: Sample make up by category

	IPA winners	No award
Charities	6	
Communications	4	35
Durables manufacturing	5	12
e-commerce		4
Entertainment	3	13
Financial Services	13	21
FMCG, food	12	74
FMCG, not food	8	97
Government		1
Other manufacturing		3
Other services		5
Retail	14	59
Transport	1	9
Utilities		4
Grand Total	66	337

Table 2: Sample make up by size of advertiser's business

Cases where advertiser size is known

£0-20m	62
£20-40m	52
£40-60m	35
£60-80m	17
£80-100m	24
£100-150m	34
£150-200m	18
£200-300m	28
£300m+	95
Total	365