

ASSESSING CREATIVE WEAROUT IN MAGAZINE ADVERTISING - VALIDATING UK FINDINGS ON WEAROUT BASED ON US DATA

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Background and Purpose

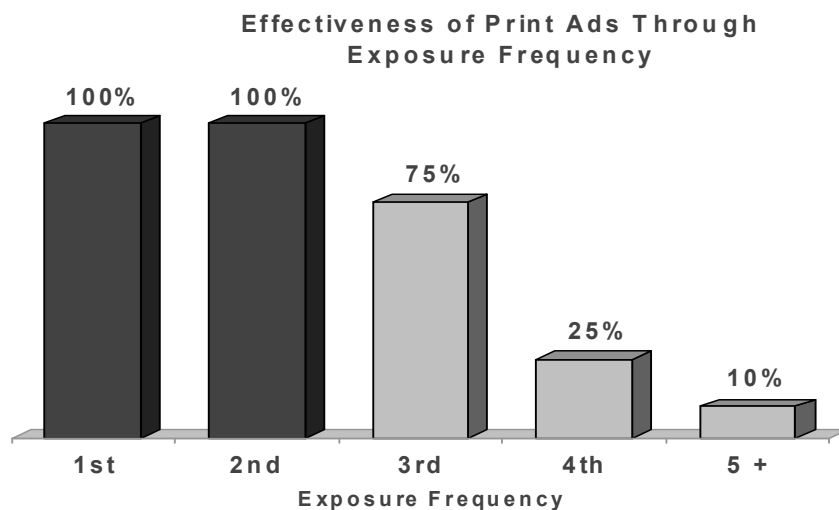
During 1991 Millward Brown conducted some landmark research in the United Kingdom (UK) investigating creative "wearout" in magazines. The study examined the hypothesis that after a certain number of advertising exposures, the effect of an individual magazine advertisement diminishes ~ it begins to "wearout" in its ability to create advertising awareness for the brand.

Findings from the 1991 MagTrak study did, in fact, confirm the presence of creative wearout in magazine advertising. Further, the study quantified the average rate at which creative wearout occurred. These findings were expressed in terms of magazine exposure frequency and changes in contributions to magazine advertising awareness for the brand. The following chart captures the magazine creative wearout rate we observed.



Understanding Magazine's Impact

- UK MagTrak work has shown that, on average, print ad effectiveness deteriorates fairly quickly.



Source: 1991 UK Magtrak

This evidence of magazine wearout varied from what Millward Brown has observed in TV over the past 20+ years. In TV, while ads can wearout in their ability to lodge incremental communications and, therefore, in their persuasive abilities – they do NOT appear to wearout in their ability to generate advertising awareness for the brand with repeated exposures over time. These observations are consistent with the beliefs that TV advertising is *entertaining* and is learned *episodically*, over time, with repeated viewings.

By contrast, magazine advertising is typically more *informative* than it is entertaining, and it is learned *semantically*. The magazine reader actively chooses to read the ad, and deliberately evaluates the relevance of the message to his/her needs; the information immediately becomes something that the consumer “knows” about the brand, and ceases to exist as a memory of an “advertisement”. Later, if a magazine reader recognizes an ad as something s/he already “knows”, s/he is likely to turn the page, and not be consciously aware of having seen it as an advertisement for the brand again.

These differences in media are characterized in the following chart:



Differences Between Media

	<u>TV</u>	<u>Magazines</u>
<i>Advertising Exposure</i>	Passive	Active/selective
<i>Product Category Effect</i>	Little	Large
<i>Attention-Getting Wearout</i>	Little	Rapid
<i>Need For Creative “Hook”</i>	Less	High
<i>Recall of Visual Elements</i>	Well remembered	Less well remembered
<i>Mental Processing</i>	Little	High degree
<i>Learning Model</i>	Episodic	Semantic

In reporting the main findings on creative wearout in magazines, Millward Brown cautioned that declining efficiencies would not necessarily apply for all brands in all contexts. However, as a starting point for campaign planning Millward Brown recommended acknowledging the real possibility of an execution wearing out with increased exposures. Millward Brown went on to suggest that it might be wise to optimize individual print executions at the 2-3 OTS level. Buying OTS of 4 or more in print maybe a less efficient use of media monies.

The purpose of this paper is to determine whether or not magazine ad awareness appears to wearout in the US; and to consider the implications of such wearout if in fact it is in evidence.

Analytic Approach and Results

Millward Brown measures the ability of magazine ads to create ad awareness for brands via a proprietary sales validated modeling technique. The basic assumption is that ad awareness is a function of:

- a) **Base Level:** This element reflects the accumulated value of previous advertising. The base level is the level to which ad awareness falls when advertising stops.
- b) **Retention Factor:** The amount of awareness which will carry over from one week to the next in the absence of advertising.
- c) **Diminishing Returns Factor:** Incremental awareness becomes increasingly difficult to gain as the overall awareness level increases, and in no instance can awareness exceed 100%.
- d) **Ad Efficiency:** The estimate of the change in magazine ad awareness per 100 GRPs, after accounting for the Base Level, Retention Factor, and Diminishing Returns Factor.

We employed this model using existing US in-market tracking study data. Consumers are asked whether or not they remember seeing recent magazine advertising for various brands (the question refers to any/all magazine advertising, it is not title specific). From this database we determined weekly magazine ad awareness for specific brands.

We then determined or estimated the levels of the first three model elements as listed above. Models were then allowed to solve for the Ad Efficiency element in such a way that the modeled awareness was as close as possible to the known/reported awareness (minimizing the Mean Square Error term).

Our thinking was ...

If the UK findings about magazine ad wearout apply here in the US, then we would expect to see three things from an analysis of the US in-market tracking study data ...

1. Measures of magazine advertising efficiency should decline for a given execution or set of executions. *Over time, Ad Efficiency should decline for a given set of executions.*
2. Advertising efficiency declines should occur fairly quickly. *Readership accumulation data suggest that, on average, magazines deliver about 75% of their eventual audience by the 4th week following issue dates and the majority of the eventual audience is secured during the first week following issue. Consequently, efficiency declines should be noticeable fairly quickly.*
3. The declines in advertising efficiency should be more pronounced when there are fewer ads in the pool and less pronounced when there are more ads in the pool. *Declining advertising efficiency, as measured at the aggregate brand level, will be more muted as there are more ads for consumers to see. If there are only one or two ads, the decline should be quite steep. With several ads, the decline should be less pronounced.*

If these things did occur, then the creative wearout findings Millward Brown noted in the UK would be validated in the US as well.

For the analysis we identified several brands and analyzed weekly magazine ad awareness (as reported in Millward Brown's ongoing tracking studies) against weekly magazine GRPs (as estimated by the IMS AdCume system) ~ and the number of creative executions running concurrently.

We thoroughly analyzed four brands: two from the liquor category where there was no concurrent TV spending, one brand from the hair care category and one from packaged goods. We then confirmed our results with four different holdout validation cases: two other liquor brands, another hair care brand and an automotive brand. We exposed each of the first four brands to the same four step analysis:

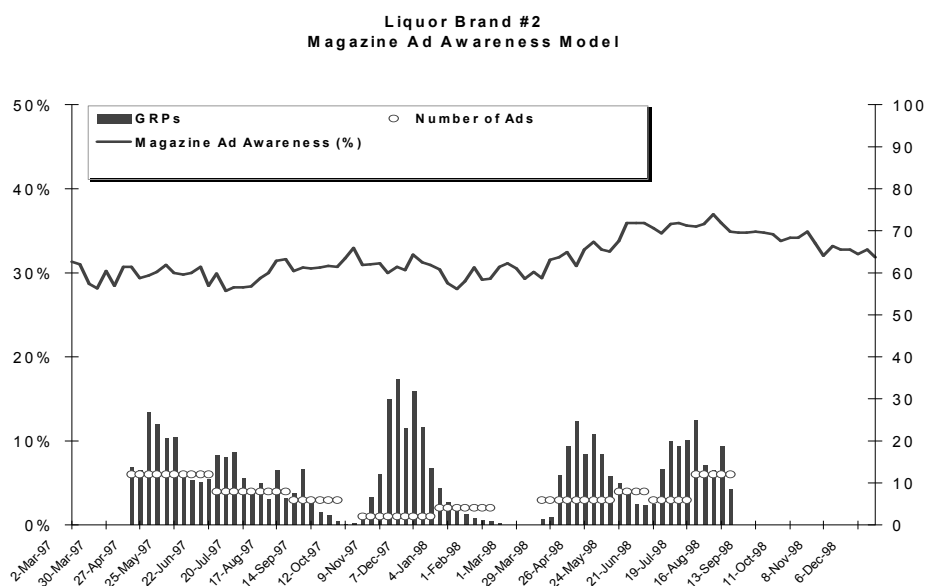
1. Graph magazine ad awareness vs. both GRPs and the number of creative executions within each burst of magazine advertising.

In the following chart for a liquor brand, weekly magazine GRPs (vertical bars) are plotted against claimed magazine ad awareness (line). Also, the number of ads running is shown (dark shaded horizontal bars). This brand had nine different ad pools and various weights.



Modeling Magazine's Impact

- **As a first step, contrast magazine ad awareness vs. GRPs and # of ads running.**



2. Model the magazine ad awareness to determine the brand's advertising efficiency for each burst of advertising ~ assuming no decay in Ad Efficiency.

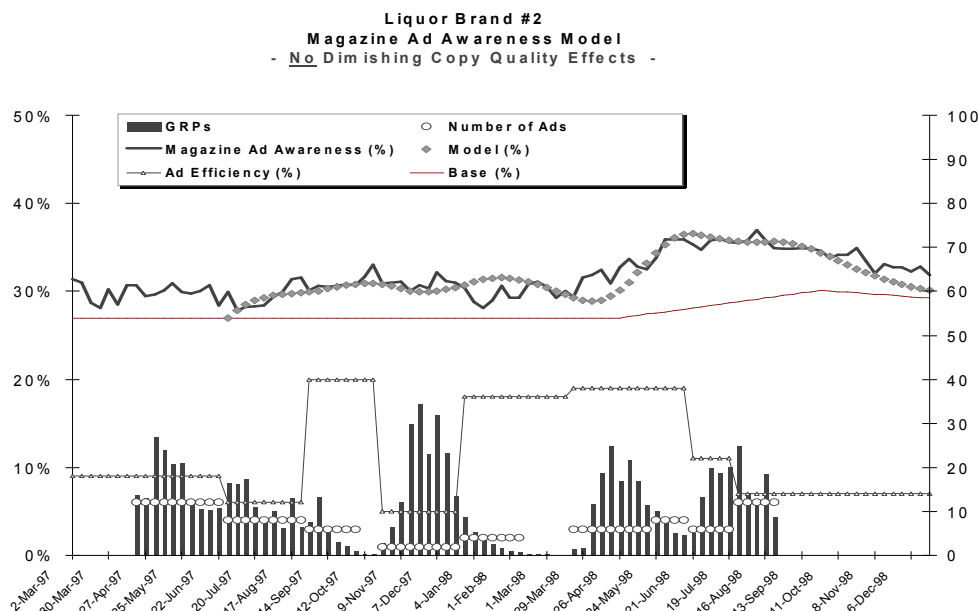
The following chart portrays the same data as before, but now also displays Millward Brown's model of magazine ad awareness with a "best fit" assessment of Ad Efficiency. Model fit was fairly good (MSE of 1.78).

For this brand, efficiency was quite variable, from a low of 5 to a high of 20 – suggesting that some of the ads for this brand were several times more efficient than others at producing magazine ad awareness. This initial modeling made no provision for any decay in Ad Efficiency. That means that the estimated Ad Efficiency was held constant throughout each burst of advertising.



Modeling Magazine's Impact

- Model fits well demonstrating variation in magazine creative impact.



3. Re-model the magazine ad awareness with decay in Ad Efficiency and see if the "goodness" of the model's fit to the data improves or worsens.

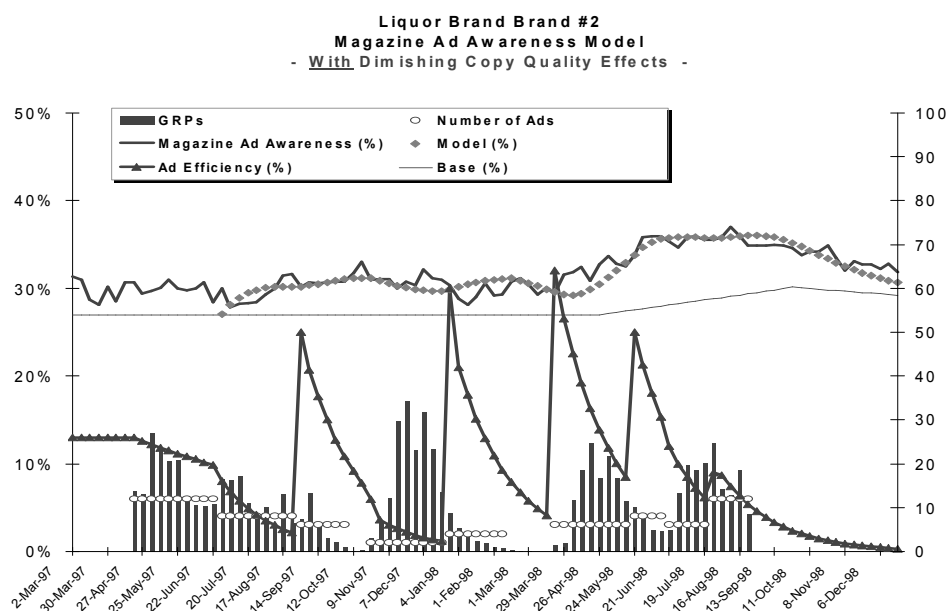
The following chart portrays the same brand re-modeled, but this time with declining Ad Efficiency. The assumption of declining Ad Efficiency means that each subsequent GRP is less *effective* at creating awareness than earlier GRPs.

Importantly, model fit improved 29% (MSE of 1.27); furthermore, this improved model recognizes ad efficiency to be at levels that are significantly higher than the earlier estimate (by about 40%).



Modeling Magazine's Impact

- Allowing for decay in magazine creative impact improves model fit by 29%.



4. Relate changes in the decay in the Ad Efficiency to the number of creative executions running during that burst of advertising.

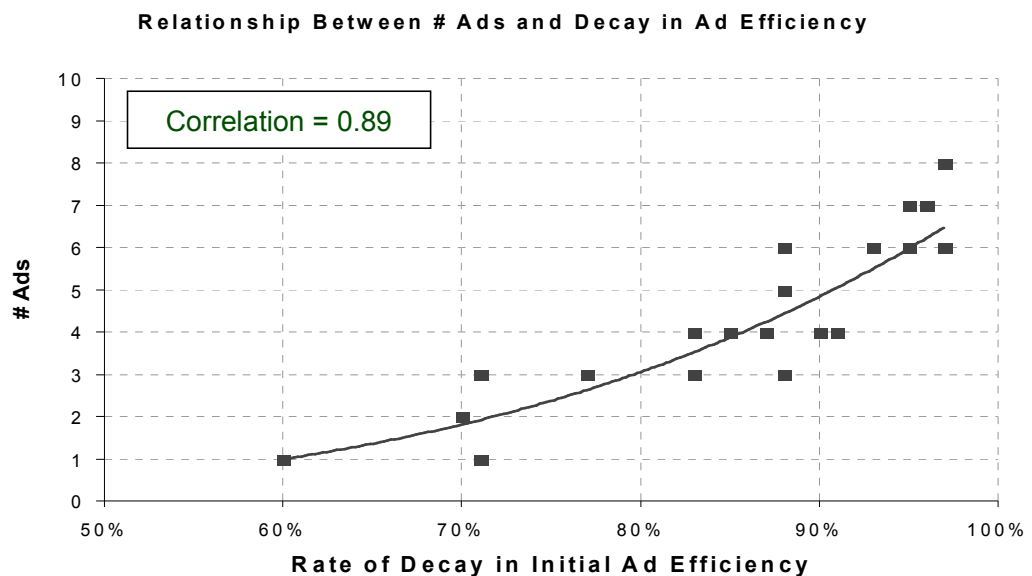
Across the four brands modeled, there is a strong relationship between the number of ads and the rate of decay in Ad Efficiency. The lower the number of ads, the more Ad Efficiency seems to quickly deteriorate.

This is demonstrated by the line on the chart. The number of ads are shown on the vertical axis (bottom to top). The rate of decay in the Ad Efficiency is shown across the bottom of the chart. Values to the right of the chart indicate that there is less decay or decline in the Ad Efficiency. As shown, lower rates of decay correspond to higher numbers of ads running in pool.



Understanding Magazine's Impact

- Across all brands modeled, the relationship between the # of ads and the decay in the initial Awareness Index is very clear.



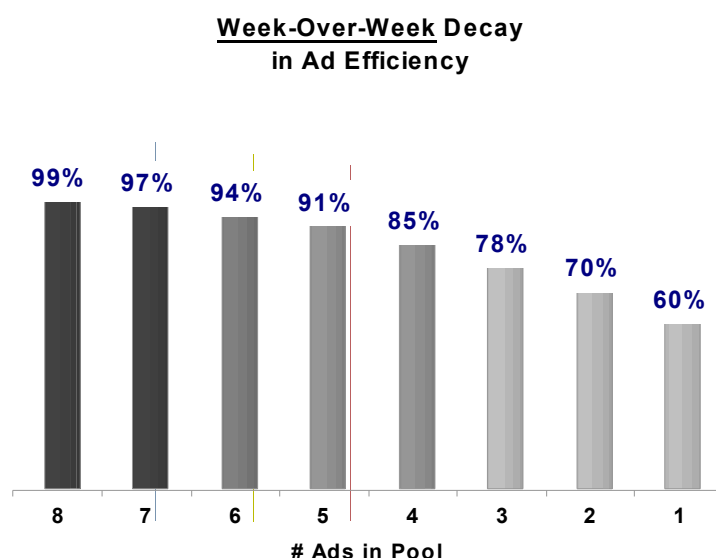
Across each of the ad pools we modeled, the relationship between declining magazine Ad Efficiency and the number of executions run in the pool is shown below. Copy quality decay with 8 executions (on the left of the chart) is negligible with week-over-week decay in Ad Efficiency only 0.99. On the other hand, with fewer than 3 executions in the pool, Ad Efficiency decay is severe – over 78% decay in week-over-week effects; in just 2 weeks, the advertising is producing less than half the initial effect.

- Although there was some variation, brand-to-brand, in the extent of the Ad Efficiency shown above, the changes were not significant – we found that Ad Efficiency decays less when there are more ads in the pool.



Modeling Magazine's Impact

- Ad Efficiency decays less with more ads in the pool.



- We found that there was **no relationship** between either *cume GRPs* or *GRPs per execution* and the *rate of decline* in magazine Ad Efficiency. In other words a heavy weight print media plan does not wear out any faster than a lighter weight plan.
- We found that there was **no relationship** between the *number of executions running* and the overall level of *Ad Efficiency*. In other words, one very strong execution may be more efficient than several weaker executions. Also, just creating several ads does not guarantee sustained ad awareness.
- This analysis has also demonstrated that the ability of magazine advertising to increase advertising awareness per 100 GRPs is higher than Millward Brown normally sees for TV ads. This is a comment about the strength of magazine advertising.¹

Implications

The findings from this analysis of US in-market tracking study data certainly appear to confirm the presence of wearout in magazine Ad Efficiency as shown some time ago in the UK analysis.

The general pattern of wearout noted in the US seems to broadly agree with UK results.

¹ The Advertising Efficiency noted from these examples in magazines (4 – 36) is greater than Millward Brown normally sees in TV

It is the firm belief of the authors that although magazine Ad Efficiency does appear to decay rather quickly, there is no reason to expect that there would be a concurrent wearout of the sales effect. The advertising messages conveyed by the different mediums are learned differently by consumers² (as depicted on page 404) -- specifically, television advertising is processed episodically and magazine advertising is processed semantically. Thus television advertising, linked in the consumer's mind to the TV episode being watched (*episodic learning*), remains for a time in his/her short-term memory and is easily recalled for the ad tracking interview. Conversely, magazine advertising is not consciously recalled "as advertising" *because the consumer has already absorbed the message as a "known fact" about the brand (or, in the case of an ineffective ad, chosen to disregard the message)*. Repeated opportunities to see the same ad -- which the magazine reader would "flip past" -- may still register as a subconscious reminder of the brand message even though they don't get recalled in an ad tracking interview.

These findings have important implications for advertisers. These include:

- **Manage magazine advertising messages.**

If messages are deemed relevant to the consumer, they will be lodged fairly quickly in the execution's life. This suggests that message planning should occur at the individual ad level within a campaign, not at the brand level.

- **Use multiple executions in order to mute wearout and maximize efficiency.**

When consumers are presented with a variety of magazine creative executions, awareness decays very slowly. Attention continues to be paid to repeated executions (because the consumer is no longer certain that s/he has seen any one specific execution already, and/or the campaign has become entertaining). Thus campaigns with multiple executions present a much greater opportunity to drive active reconsideration of the brand with each incremental exposure.

Media plans that minimize duplication between publications can be used to sustain message delivery over time. Media plans with high levels of duplication between publications should employ different executions to avert creative wearout.

- **Consider media mix.**

The initial efficiency of the typical magazine ad is considerably greater than the initial efficiency of the typical TV ad. This initial efficiency should correlate directly with a sales effect.

² "Capturing The Complexity Of Advertising Perceptions", A.Branthwaite and A.Swindells, Millward Brown International, 1992.

