Creative determinants of viral video viewing

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This study assesses the creative attributes that drive online viral viewing of TV advertising. The analysis is based on 102 video ads from the UK and US, which were shown on TV and also online. Results show that established advertising pre-test measures such as enjoyment, involvement and branding, which predict ability to generate offline TV advertising awareness, can also predict ability to generate viral viewings. In addition, distinctiveness and perceived likelihood to pass along to others are identified as key determinants of viral viewing. Where celebrities appear within the advertising, this also plays a significant role. Category and brand interest do not appear to play a significant role. This strongly suggests that existing advertising pre-test tools such as the Millward Brown Link™ solution can be successfully used to understand the viral potential of advertising, as long as tailored questions and analytic approaches are developed to allow for the viral viewing environment. The role of other non-creative factors, and implications for marketers, are also discussed.

Introduction

Online video viewing is now commonplace. Data from comScore's Video Metrix service showed that US internet users watched more than 25 billion online videos in August 2009 (comScore 2009). YouTube was comfortably the largest individual site, accounting for more than 10 billion views, while Microsoft sites were a distant second with 547 million. As consumers have spent increasing amounts of time consuming online video, advertisers have sought ways to engage this audience with their branded videos. This paper seeks to help those advertisers better understand the type of video advertising that is most likely to be viewed online.

The scope of our investigation was limited to viral video advertising. We do not focus on the broader topic of viral marketing, although some of the

learning we generate may also be relevant beyond the video format. Nor do we focus on paid online video advertising (such as that which appears as pre-rolls before online content on sites such as hulu.com or msn.com). Our primary goal was to understand what makes an ad so good that consumers are driven to share it, promote it, discuss it or hunt it down – all of which generates voluntary video viewings – as opposed to the forced, paid viewings that are generated when a brand advertises on TV.

Porter and Golan (2006) suggested the following definition of viral advertising in the context of video: 'Viral advertising is unpaid peer-to-peer communication of [provocative] content originating from an identified sponsor using the Internet to persuade or influence an audience to pass along the content to others.' The inclusion of the word 'provocative' seems unnecessarily prescriptive and limiting – hence the reason we have bracketed it above. Some successful viral ads may be provocative but there are clearly others, such as T-Mobile's 'Dance', which are not particularly provocative. That aside, this definition seems very sensible, and is the one we have adopted.

Viral video exposure can be of great potential value to marketers. First, viral viewings are effectively 'free' advertising. Beyond that, it can be argued that online viewing represents opportunities for deeper brand engagement, since viewers are watching the ad of their own free will and the online placement also allows for further interaction – replaying the ad, rating it, adding a comment – or even forwarding it to another friend to continue the viral cycle. Advertisers may also believe that their videos will be viewed particularly favourably if they have been recommended by a friend or online source in advance.

This potential means that many advertisers are designing video campaigns with an eye to their viral scope, and are incorporating interactive elements to give consumers a way of getting involved and engaged with their brand. These new objectives mean that success is being defined differently. Advertisers are increasingly questioning whether the same rules apply. On TV, ads needed to perform in an enforced exposure environment. Is a different type of ad required in this new world?

Data sources

Viral viewing data
YouTube has been at the heart of the growth in viral video in recent years, and is the data source we used to represent 'viral viewing'. While it is possible to buy paid advertising on YouTube, this was not the focus of our investigation. YouTube video links can be shared in many ways, including word of mouth, emails, online articles, blog links, Facebook video-sharing applications and Twitter posts. It is also the default place to search if you are looking for a new ad for a brand. There is now a degree of expectation that ads will be available on YouTube when consumers look for them.

Advertising pre-test data
The second dataset we will draw on for this paper is the Millward Brown Link™ database. Many major advertisers conduct pre-testing of their video advertising before it is broadcast live on TV or shown and posted online. Millward Brown's Link™ solution is one such pre-test and is used by a large number of advertisers worldwide in a wide variety of categories. A typical Link™ study comprises around 150 25-minute interviews about an advertisement, which are conducted among a target audience relevant to the advertised brand. Questions are asked consistently across studies so that the aggregate results across a large number of tests provide access to a substantial database of pre-testing scores for a rich range of measures about the nature of advertising. Further details of the ads selected can be found later, in the Method section, and further details of the Link™ solution can be found in the Appendix.

It should be noted that all videos investigated here were TV ads that had also been placed online. Therefore the dataset did not include examples of ads that were designed exclusively for the online environment. As such it cannot be considered representative of all viral videos. However, there are many ads that now need to play this dual role, so we believe the dataset to be both interesting and relevant. The dataset also had the advantage of being of a relatively consistent format and approach (for example, ad lengths were broadly similar, and there were no unique interactive 'tricks' to any of the videos we examined).

Hypotheses

Established creative drivers (enjoyment, involvement and branding)

We are not aware of other published studies that have identified creative determinants of viral video success. In the context of all viral marketing, Dobele *et al.* (2005) found that successful viral marketing campaigns comprise an engaging message that involves imagination, fun and intrigue, encourages ease of use and visibility, targets credible sources, and leverages combinations of technology. In the context of email viral marketing, Phelps *et al.* (2004) suggested that messages that spark strong emotion – humour, fear, sadness or inspiration – are likely to be forwarded. In this study we sought to confirm the importance of an engaging idea using the Link™ involvement measure, and the importance of a strong emotional response using the Link™ enjoyment measure. Both involvement and enjoyment are established drivers of offline success (Twose & Smith 2007), which we expected to remain important online.

Branding is another established metric of offline creative success. Unless advertising memories are associated with a particular brand, there is clearly little chance of those memories having a positive impact on brand attitudes. Some advertisers and agencies may believe that strong brand integration could actually inhibit viral success, thinking that subtle branding may make the content more appealing, and more likely to be viewed. This paper therefore seeks to identify whether branding also plays a positive role online.

As outlined by Twose and Smith, the combination of enjoyment, involvement and branding can be used to provide an estimation of offline branded advertising efficiency (the Millward Brown Awareness Index; AI prediction). This validated measure (Brown & Coleman 1983; Brown 1986, 1991; Twose & Smith 2007) predicts the rise in TV advertising awareness that will be generated given a certain amount of TV media spend behind a specific creative treatment. While this metric can predict the impact of TV ads, additional research was required to establish whether it would still be relevant to viral videos. This brought us to the first of five hypotheses:

H1:   Established creative drivers (enjoyment, involvement and branding) positively predict online viral viewing volume.

Distinctiveness

Only a limited number of video ads will be sufficiently interesting for consumers to track them down online. In this free-choice viewing environment, do ads need to stand out from the crowd? Wu and Huberman (2007) have used digg.com data to show that novelty plays an important role in the popularity of online content. The phenomenal success of videos such as Old Spice's 'Man your man could smell like' and Evian's 'Roller babies' suggest that unusual ads can work well online. We predicted that ad distinctiveness vs all other video advertising would be particularly important in predicting online viral success. Therefore:

H2: Ad distinctiveness positively predicts online viral viewing volume.

Celebrities

Celebrities are frequently employed advertising weapons, used by marketers in many categories and countries in an attempt to imbue their brand with fame, credibility and relevance. Across all TV ads tested to date, Millward Brown has established that celebrity presence is in fact usually no guarantee of advertising success – celebrities have only a very slight positive impact on enjoyability and branding (Millward Brown Knowledge Point 2007a).

However, celebrities play an important role online, as a source of entertainment, gossip and news, and many celebrity music and sports videos are among the most viewed of all time on YouTube. We therefore examined whether the presence of a celebrity in an ad can drive online viewing, and in particular whether the popularity of a celebrity can impact the chances of a viral video being viewed.

H3: Celebrity popularity positively predicts online viral viewing volume.

Claimed likelihood to forward (buzz)

If consumers particularly like an online ad, one way they can 'vote with their mouse' is to forward the ad to others. This is not the only way in which viral videos can travel (other factors are explored in the Discussion section, below), but consumer willingness to do this suggests the ad itself has the useful viral attribute of being able to generate 'buzz'. Under the

assumption that consumers are able to predict their own behaviour, we expected our survey-based assessment of 'likelihood to forward' to be reflected in the number of live viewings. Therefore:

H4:   Claimed 'likelihood to forward' survey responses positively predict online viral viewing volume.

Category and brand interest
It may well be that some brands or categories are more likely to generate viral video success. Millward Brown has historically showed that category interest plays a major role in the impact of print advertising, but much less of a role in TV advertising (Millward Brown Knowledge Point 2007b). We predicted that, like print advertising, online viewing would be greater for high-interest categories and brands (categories or brands for which a large proportion of consumers claim to be interested). Therefore:

H5:   Levels of category and brand interest positively predict online viral viewing volume.

Method

Case selection

Case selection for this study was determined primarily by whether ads were available within the Millward Brown Link™ database. All of the ads selected were pre-tested as finished commercials and were aired on TV without significant modifications. Millward Brown also conduct pre-testing using animatic or unfinished commercials – they were not included in this analysis to ensure that the creative responses captured would most closely reflect the final videos that appeared on YouTube.

These restrictions did significantly limit the number of cases, since many clients change ads as a consequence of pre-testing, and some decide not to air the ad at all. The cases selected for this analysis are representative of the entire Millward Brown Link™ database, although the ads examined here as a group are slightly above average performers. Across the key measures being used to assess the above hypotheses, the cases in this dataset have average levels of branding, likelihood to forward and

distinctiveness, a slightly above average level of enjoyment and an above average level of involvement, in comparison to relevant country norms.

Millward Brown employs both central location and web-based approaches to ad pre-testing. For consistency of data, we have used only web-based pre-test data for this research. We have also used only ads that have been tested fairly recently: all ads were tested by Millward Brown between July 2007 and January 2009.

Using this dataset, we then tracked down as many of the ads as we could find on YouTube. A large number of UK and US TV ads now appear on YouTube. They may be posted to the website by ad agencies, clients or other site users. Some of those we couldn't find may have been posted and later removed, or may have evaded our searches if their posted titles were not obviously representative of the creative. In total, we tracked down around two in three of the UK ads we searched for, and around one in three of the US ads. Many of these ads had been posted by more than one YouTube user. As far as was possible using a manual search, we then captured and aggregated data for all occurrences of each video. The final dataset contained 102 video ads.

Measures

To enable us to combine results from both the UK and US, all Millward Brown pre-test measures were first normalised against their respective country average. This addressed the fact that individual questions perform differently in different cultures. This left us with Index scores summarising the strength of each video in terms of:

- branded advertising efficiency (Awareness Index) and its components (enjoyability, involvement, branding)
- distinctiveness
- likelihood to forward.

Twenty-three of the ads (six UK and seventeen US) within the dataset contained a celebrity or celebrity grouping). For each of those ads, we also obtained a further figure to represent the status and popularity of those celebrities. The measure of popularity selected was online search volume, as captured via the publicly available Google Insights for Search interface.

Using this, we benchmarked the popularity of all celebrities in our dataset against the popularity of Angelina Jolie, a celebrity who consistently achieves a very high search volume. This benchmarking is necessary because the Google Insights tool provides a search volume index score, rather than an absolute search volume figure.

The following publicly available measures were captured from YouTube during July 2009:

- date first posted
- total views.

Other YouTube measures, such as average rating, number of comments, and number of times 'favourited' were also captured and examined. Generally, these measures were less representative of overall viral success. For example, on average we found our videos were 'favourited' just 28 times for every 10,000 times they were viewed, rated only 14 times and commented on just nine times. The number of times 'favourited' and commented on correlated fairly strongly with the number of views (0.70 and 0.74 respectively). The average rating showed relatively little variation across ads – most YouTube users who choose to rate an ad seem to give it four or five stars (the average rating for most ads is 4.6 out of five stars). Hence, in this analysis, we are focusing simply on the number of viral views as the best overall measure of a viral video's success in generating exposure.

Data analysis

From the date that the ad was posted on YouTube and the total views recorded we were able to generate a 'views per week' measure. This enabled us to more fairly compare across ads that had been available online for varying time frames. An analysis of this measure quickly determined that it was a significantly skewed variable – most videos attain a low number of views per week, while a few very successful videos receive a much greater number of views per week. We therefore logged the views per week measure to give us a linear variable, which we were then able to compare with our Link™ survey measures, which have normal distributions.

Figures 1 and 2 illustrate the views per week variable prior to logging. Ads from the UK and the US are plotted separately.

Figure 1: UK views per week distribution (ads that contain a celebrity are denoted by a black 'diamond')
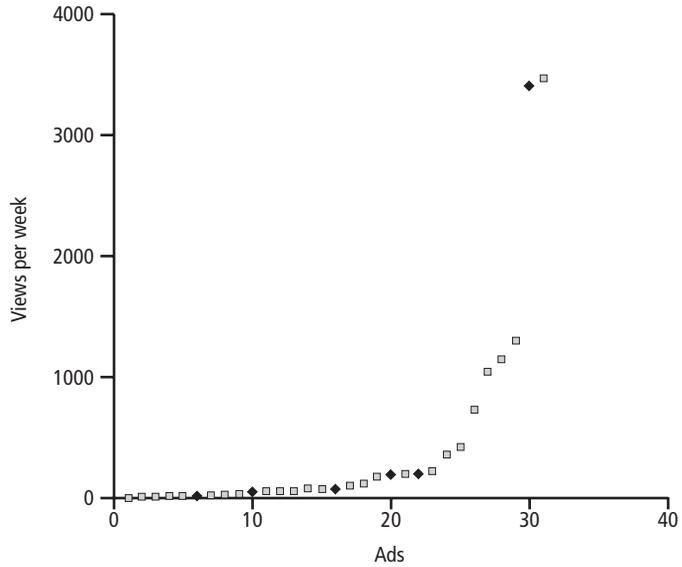
Figure 2: US views per week distribution (ads that contain a celebrity are denoted by a black 'diamond')
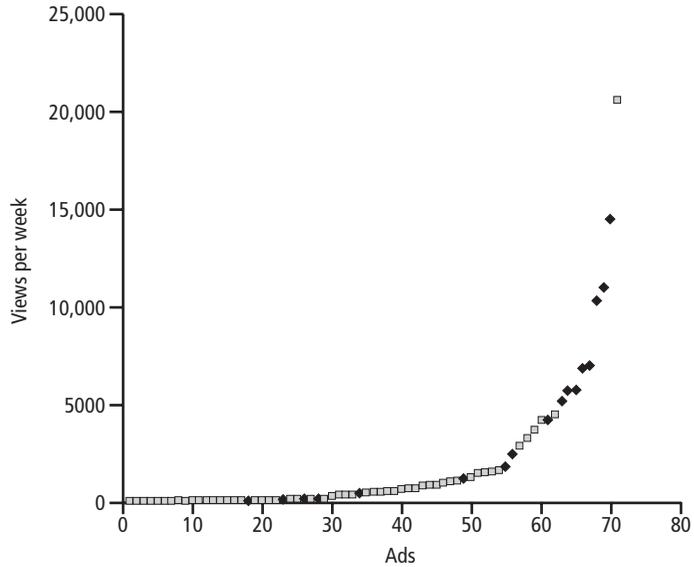
Results

The first four of our five hypotheses were proven true – the fifth is not a significant result. While we cannot interpret correlation as causation, we can say that the significant relationships observed are measures that can be used to help predict viral viewing volume. The full results can be found in Table 1.
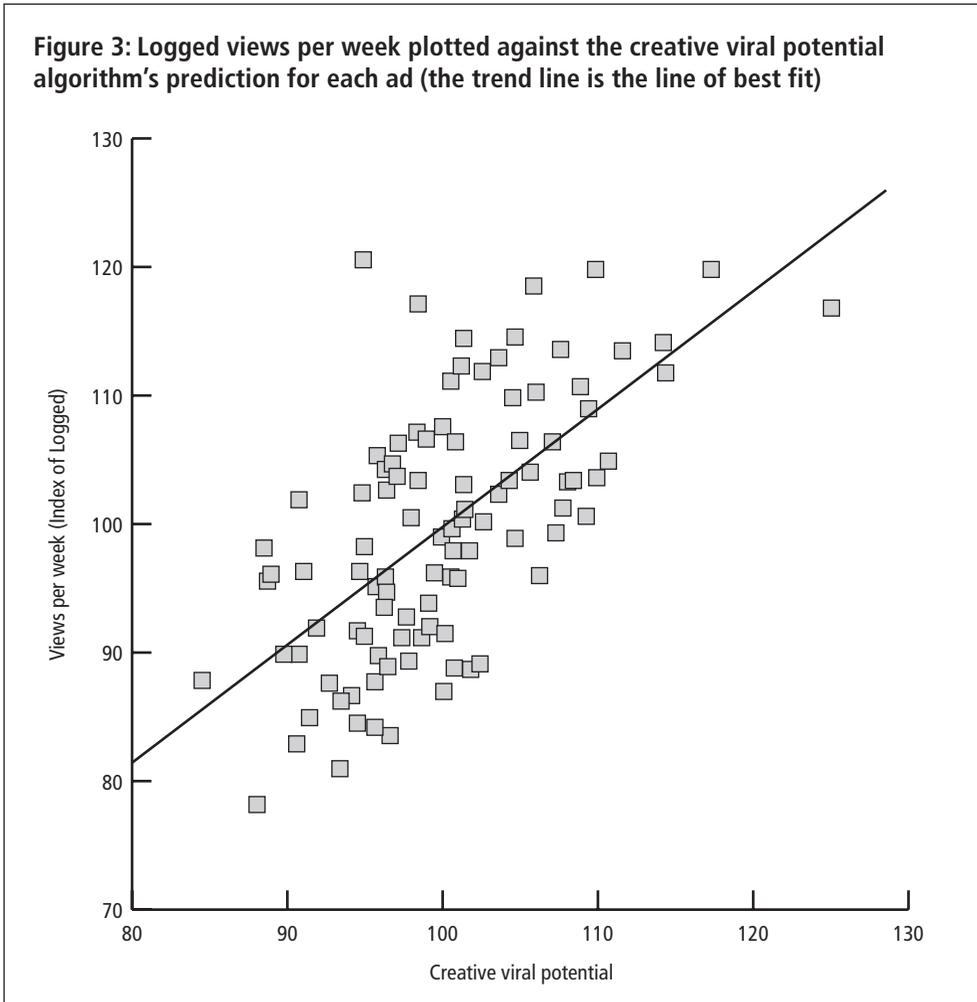
Beyond these hypotheses, we also developed a regression formula combining measures of branded advertising efficiency (Awareness Index), distinctiveness, celebrity popularity/presence and claimed likelihood to forward, and found that this most strongly predicts online viral viewing volume. This 'Creative Viral Potential' formula and YouTube views per week are strongly correlated: $r(97) = 0.63$, $p < 0.001$. We checked whether this regression was being driven by one or two outliers, but this was not the case. Removing the highest viewed outlier ad actually increases the correlation: $r(96) = 0.67$, $p < 0.001$.

Table 1: Correlations between Link™ measures and YouTube views per week

Hypothesis	Correlation (r)	N	p
H1: *Established creative drivers* positively predict online viral viewing volume			
Enjoyment	0.40	102	<0.001
Involvement	0.33	92	0.001
Branding	0.19	102	0.058
Awareness Index (branded ad efficiency)[1]	0.43	99	<0.001
H2: *Distinctiveness* positively predicts online viral viewing volume	0.46	91	<0.001
H3: *Celebrity popularity* positively predicts online viral viewing volume	0.31 (0.43 among celeb ads)	102[2] (23 with celebrities)	<0.001 (<0.001)
H4: *Claimed likelihood to forward* (buzz) positively predicts online viral viewing volume	0.38	85	<0.001
H5: *Category and brand involvement* positively predict online viral viewing volume	0.14/0.13	75/74	Both >0.1

[1] As an extension of H1, we also explored whether the correlation with viral viewing could be improved using a reconfigured version of the branded advertising efficiency (Awareness Index) measure. We did not find a re-formulation of this measure that significantly improved the correlation, hence the established Awareness Index algorithm remains valid.
[2] The celebrity correlation across all cases treats no celebrity presence as a zero value.

Figure 3: Logged views per week plotted against the creative viral potential algorithm's prediction for each ad (the trend line is the line of best fit)

We did not find it useful to include a measure of category or brand involvement in the regression formula. A large number of other advertising pre-test measures were also assessed, and none was able to significantly improve the overall fit of this regression model. This reassures us that the H1–H4 measures assessed above are all important determinants of successful viral creative. While the correlations are highly significant, the absolute level of the correlations makes it clear that there is also some degree of variation due to factors beyond the creative itself. These factors are explored further in the Discussion section that follows.

Discussion

Creative mechanisms

These results show that the power of the creative accounts for over half of the variation we see in viral performance. Thankfully, this is also the element of a campaign over which a marketer (initially, at least) has most control.

Our H1 results showed that the three individual elements of enjoyment, involvement and branding all had a significant positive correlation with our logged views per week measure. Involvement and enjoyment are clearly the more important of these measures, and will be the main mechanisms by which a film will have most of its effect online. However, the positive branding correlation is particularly interesting. In order to have an impact on brand attitudes, a video must attach good memories to the brand, otherwise it's just an act of charity by that brand. This research suggests that branding plays a further role online, since strong branding is likely to result in more viral viewings. This may partly be because strong brand integration is a sign of a well-structured video, or it could also be that a well-branded video is easier for consumers to find online. In any case, it highlights the danger of forgetting about branding in creative development. This is particularly true since many of these videos will also need to function successfully in the offline world, where the majority of their viewings will still occur.

That we could not improve on the established Awareness Index formulation implies to a large extent that the same 'rules' of successful TV advertising can also be applied to viral video. Marketers looking to benefit from viral viewings should remember some of the 'fundamentals' of good advertising, which are to engage and involve your audience, make your ads enjoyable and to integrate your brand.

Additionally there is clear evidence that some new factors are also important: how distinctive the ad will seem, the role a celebrity may play in spreading the brand's message, and the potential 'buzz' of an ad. This implies that existing advertising pre-test tools, such as the Millward Brown Link™ framework, can be successfully used to understand the viral potential of advertising, as long as their analysis is modified to allow for these new variables that play a role in the viral viewing environment.

Previous research by Millward Brown (Nealon 2007) also established qualitatively that 'buzz' can be enhanced by factors such as whether an ad is **L**augh-out-loud funny, **E**dgy, **G**ripping or **S**exy (i.e. whether it has 'LEGS'). These creative approaches may be worth considering, as long as they are in line with brand objectives.

Intuitively, we expected more 'interesting' brands or categories to have a greater opportunity to succeed virally. Yet the relatively low correlations we observed with category and brand involvement suggest that good creative is more important than the category or brand itself. With more data, we may yet find that these low correlations reach significance. However, for now, we can infer that any type of brand can achieve viral success, as long as its creative is sufficiently strong in other respects.

Other factors and managerial implications

Although creative mechanisms are important, this finding should be kept in context. There are many other factors at play that can impact on whether or not a campaign 'goes viral'.

Watts and Peretti (2007) found that both the propagation rate (the degree to which people are willing to pass an ad on to others) and the scale of initial seeding determine the size of the viral audience. To a large extent, the propagation rate is likely to relate to the creative mechanisms we have studied here, most specifically the likelihood to forward 'buzz' measure tested in H4. The initial scale of seeding then acts as a multiplier against this propagation rate. Watts and Peretti advocate 'big-seed marketing' – that is, placing advertising with a large number of consumers in order to give the ad a greater chance of going viral.

Woerndl *et al*. (2008) identified five factors that may critically influence the success of viral marketing campaigns. One of these was the content of the message, which has been our focus here. Another was the characteristics of the product, which we have also considered in our category and brand analysis above. The other three were the diffusion characteristics, the overall structure of the campaign and the peer-to-peer information conduit. We consider diffusion characteristics such as the speed and reach of diffusion to be measures of viral success more than factors driving it. The other two factors bear further examination in the context of viral videos.

The overall structure of a campaign and peer-to-peer information conduits could have the potential to impact viral success. Woerndl *et al.* talk in terms of campaigns encouraging viral marketing activities, and of suitable channels and technologies being available for consumers to spread the viral message. Viral videos can be placed online in ways that make them easier to forward – perhaps by placement on a branded page on YouTube or a dedicated campaign microsite. They also discuss the role of source credibility, which some specialist viral seeding agencies respond to by spending considerable time placing their clients' viral videos with suitable opinion formers and viral video platforms to help generate viral success. To these factors we would add the following.

- It may well be that virals that are part of a campaign benefit from the collective strength that linked executions provide. The ongoing Blendtec campaign is a great example. Every time a new 'Will it blend?' viral is released, that new viral has the potential to generate additional viewings for previous virals.
- Some campaigns may be supported by paid media. The video ad itself may have appeared on TV, at cinemas or in paid online video slots. Other media, such as posters or print, may also have played a role. PR can also have a major impact – both online via viral seeding agencies, and also offline in print and other media. Some brands will benefit from all of these elements – for example, Dove's 'Campaign for real beauty' benefited from a major TV, outdoor, online and PR campaign, which helped drive viral viewings of the 'Evolution' video.
- How the ads are named can also make a difference. When tracking down the ads for this study, we found that videos can be very difficult to find if they are given obscure names. This is despite the fact that YouTube has a very good video search feature. The ad name itself clearly has two functions: among random surfers, an intriguing name may help drive viewing; however, among focused searchers, a more obvious name may help increase viewings. Advertisers can only control how their own 'official' version(s) of the video are named – but they should consider carefully how they name them.
- There is also, then, an element of luck. Some campaigns will inspire mash-ups, spoof responses, re-edits and other online chatter. At this point, the marketer starts to lose control of the campaign, and things

may take unexpected twists and turns, but, with luck, they could be benefiting from a massive viral surge in brand interest.

These 'media' factors should all be considered when planning a viral video campaign.

Limitations and future research

The precise roles of the 'media' factors described above could usefully be explored in more detail in future work.

As previously mentioned, this research is limited to publicly available viewing data from YouTube. Although YouTube is comfortably the leading video site in the UK and US, it is possible that results could have been different with more data from additional platforms. Also, how and why viewing levels vary by platform could form an interesting extension to this research.

The scope of this research was also limited to the UK and US. While Millward Brown does ask similar pre-test questions in other countries, it is not always so typical for advertisers to post their ads to the YouTube site, and the absolute volumes of online video viewing also vary significantly. In future this research could be extended to other countries where videos are posted online. In the meantime, those countries can probably assume that similar variables to those identified here will play an important creative role, even if we are not yet able to quantify those relationships. Previous Millward Brown work has seen the same creative variables predict offline ad effectiveness across countries, so it seems fair to hypothesise that this would also be true for viral variables.

This paper has used 'views per week' instead of 'total views' since this is a simple and fair way to make comparisons across ads that have been online for varying periods of time. A measure such as 'views in first three months' could not be used since that information is not publicly available. It is possible that viewing rates may vary over time and that growth curves may differ across ads (some ads may build quickly and then fade, others may start slowly and increase gradually). Our initial analysis suggests that there is not a relationship between views per week and number of weeks online. This suggests that views per week is a reliable and stable measure to represent viral viewings since it does not unduly favour ads that have

been online for short or long periods of time. However, the growth of viral viewing over time is something that could be explored more in future research.

Also, as previously mentioned, the cases here are solely TV ads that have also been placed online; videos designed exclusively for the online viral marketplace have not been assessed. We do believe that these results should still be valuable to online-only marketers, though the research approach could usefully be extended to online-only videos to see whether the same factors apply.

The creative mechanisms assessed within this paper are relatively broad creative drivers. Future research could focus on more specific creative attributes and responses. For example, Dobele *et al*. (2007) asserted that, in order to be effective, viral messages need to contain the element of surprise (though surprise alone is not enough to guarantee message success). The Millward Brown Link™ pre-test also asks a detailed emotional response measure, and initial analysis of these data suggests that surprise and excitement may be particularly strong drivers of viral success, which partly confirms Dobele *et al*.'s assertion. This is something that could be returned to in future work.

Finally, one of the more successful videos within this dataset contained very prominent music. Millward Brown has previously shown that enjoyable music can boost ad response (Millward Brown Knowledge Point 2008). Future research could therefore explore the role of music in driving viral viewings.

Conclusions

In an era of integrated marketing communications, it is important to examine all communications companies have with consumers. Increasingly, some commercials or promotions can become viral in nature, and it is therefore important for advertisers to understand which campaigns are most likely to benefit from viral online viewing. This study has shown that established advertising pre-test measures such as enjoyment, involvement and branding, which predict ability to generate offline TV advertising awareness, can also predict ability to generate viral viewings. In addition, distinctiveness and perceived likelihood to pass along to others are identified as key determinants of viral viewing. Where celebrities appear

within the advertising, this also plays a significant role. Category and brand interest do not appear to play a significant role. This strongly suggests that existing advertising pre-test tools, such as the Millward Brown Link™ solution, can be successfully used to understand the viral potential of advertising, as long as tailored questions and analytic approaches are developed to allow for the viral viewing environment. Many other non-creative factors may also play a role and these could usefully be explored further in future research.

Appendix: About Millward Brown and Link™

Millward Brown is one of the world's leading research providers, with a primary focus on brand, communications and media research. The company has offices in 50 countries, and works with over 70 of the world's top 100 global brands.

Over 60,000 Link™ for TV tests have been conducted since the solution was established in 1989. A typical Link™ study comprises around 150 25-minute interviews conducted among a target audience relevant to the advertised brand – for example, a study for a female haircare product will be conducted among females who buy haircare products. Participants are shown an advertisement and they then assess the ad using a mixture of closed and open questions. Different fieldwork methodologies are used around the world, but all studies in this particular analysis were conducted using online interviewing. Online samples are drawn from large web panels such as Lightspeed, which provide audiences representative of the entire online population.

The core measures used in this research were:

- *Awareness Index* – a composite score that combines enjoyment, involvement and branding ratings
- *enjoyment* – the mean score of a five-point rating scale
- *involvement* – three four-word questions where respondents must choose one word from each question to describe the ad; each question contains words that are active +ve , active –ve, passive +ve and passive –ve; across the three questions, we sum the percentage of respondents endorsing active words to generate our 'involvement' score
- *branding* – the mean score of a five-point rating scale

- *buzz* – the percentage of respondents endorsing the top box of a three-point rating scale
- *distinctiveness* – the mean score of a four-point rating scale.

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