

VISIOLINK INSIGHTS

DIGITAL ADVERTISING FORMATS IN TABLET BASED E-PAPERS



Digital advertising formats in tablet based e-papers

PREFACE

In spite of the possibilities of using digitalization to enhance the attention and experiential qualities of newspaper advertising, most ads in digital papers are still simple and static copies of the printed ad versions. In cooperation with the Danish newspaper Jyllands-Posten and the creative ad agency OnAds, Visiolink and the Department of Business Administration at Aarhus University have devised and implemented a study of the recall and experience of digital ads, when reading tablet based newspapers in an approximated realistic situation.

Below, we describe the implementation and results of the study and conclude that although digital ads are remembered much better than printed newspaper ads in the e-paper, there are only minor effects with regards to the recall and ad-liking of the dynamic and interactive formats. When it comes to traditional online measuring terms, there is an indication that Click-Through-Rates (CTRs) are higher for static and interactive ads, and that engagement levels (interaction rates) are higher for interactive ads.

In this report, we describe and discuss the relevant effects and differences across four different creative ad formats.

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INTRODUCTION

With circulation numbers and advertising revenue for printed newspapers seeming to continue their decline, the media industry has for the last decade strived to find new long-lasting digital business models. Since the launch of the iPad in 2010, most media companies have introduced e-papers, often in combination with other digital offerings, with the aim of reaching both existing and new audiences (Jacobsen, 2014). E-papers are based on the PDF and XML format taken from the editorial system of the newspaper and as such are 1:1 replicas of the printed publications. Consequently, ads in the e-paper are typically the same as the ads in the printed paper, so for most digital papers on the market, the dynamic and interactive opportunities available in ad digitalization remain unexploited.

One likely reason for this state of affairs is the costs involved in the full exploitation of the dynamic and interactive potentials provided by digital publishing technology. However, there are good reasons to study the importance of both the positive (e.g. attention generating) and the negative (e.g. annoying) effects of digital ads, as new low cost approaches are now available to media companies that want to offer their advertisers digital solutions, and also as media users increasingly tend to become irritated over the intrusiveness and omnipresence of advertising (Tellis, 2004).

Below, we present a study of an experimental implementation of a low cost approach for **static**, **dynamic** and **interactive** ads in the tablet-based version of the largest Danish newspaper Jyllands-Posten. In particular, the study concerns a comparison of the recall of:

- **digital** ads compared to **printed** ads, and
- varying versions of the digital ads with different types of **static**, **dynamic** and **interactive** possibilities.

Also, the study explores how newspaper readers engage with the tablet based ads by registering finger swipes and clicks, and assess the digital ads on a number of positive and negative experiential dimensions (e.g. inspiration and confusion).

The low cost approach applied in the study involves the use of:

- Interstitials, defined as ads which are digitally inserted in the e-paper and which therefore are not present in the printed paper and hence do not require changes to be made to the printed paper,
- Reuse of, or moderate modification of, existing advertising content with dynamic and/or interactive elements.

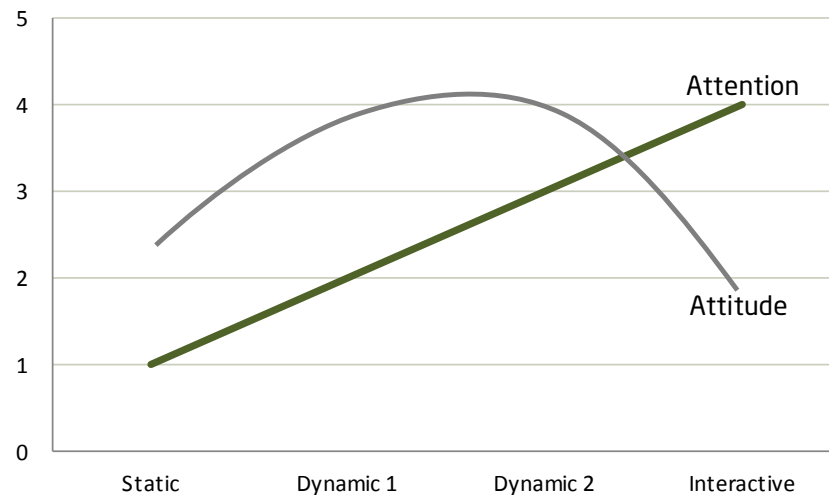
While acknowledging the immense distance between such a design and the creative opportunities offered by digitalisation, we maintain the expediency of taking small steps when aiming for solutions that are both acceptable to readers and economically sustainable for advertisers.

CLICK-THROUGH RATES, RECALL AND THE EXPERIENTIAL QUALITIES OF DIGITAL ADS

Although Click-through Rates (CTRs) for digital ads have been the subject of many discussions in recent years, they are still the de facto measure of internet advertising effectiveness. A banner ad study by Drèze and Hussherr (2003) suggests that the reason why CTRs are low is that web surfers avoid looking at banners during their online activities. In the case of digital interstitials, the fact that readers cannot avoid exposure and that ads can be targeted to a narrower target group may lead to higher CTRs. The forced exposure may, on the other hand, lead readers to reject the advertising message and its propositions for interactivity. The latter effect can be particularly vociferous, if readers become annoyed at the high levels of bells and whistles and animation in digital ads.

The recall of and attitudes to printed newspaper advertising depend on a number of objective factors related to the format, colours and positioning of the ads, as well as on the match between the creative content and the target's motivation and ability to process (Tellis, 2004; Smit et al., 2013). In addition to these factors, it is likely that the recall of and attitude to a digital newspaper ad also depend on the level of dynamics and interactivity employed in the ad. In particular, it may be expected that a deviation from the static (print) format to increasing levels of dynamics will have an increasingly positive effect on attention and, hence, probably also recall, whereas an inversed U-shape relationship is expected between the attitude to the ad and increasing levels of dynamics (cf. Schoormans & Robben, 1997). It is not clear, however, how

interactivity affects recall and interaction. On the one hand, interactivity facilities may engage readers and lead to enhanced recall and ad-liking, but, on the other hand, it may confuse and disturb readers, thus leading to lower (brand) recall and ad-liking. This is illustrated in the following figure:



Proposed relationships between static, dynamics, interactivity, recall and ad-liking of digital ads.

Apart from these considerations, which are relevant for all digital ads, another issue related specifically to the recall and attitude of tablet-based ads, is the experiential aspect of whether and how dynamics and interactivity stimulate the reader's physical interaction with the ad. According to Garcia (2012), the key to enhancing the reader experience and involvement on such platforms is to 'engage the finger'. But, although the potentials for experiential processing (e.g. experiences related to escapism, education, aesthetics or entertainment; cf. Pine & Gilmore, 1999) are generally greater in digital – and in particular for tablets – compared to print advertising, it is likely that the size of this potential depends on the advertised product category. In other words, it is reasonable to expect that certain product categories (e.g. perfume) have a higher potential to stimulate experiential processing than others (e.g. detergents).

METHOD

The study was conducted as a hall-test in a larger shopping centre (Storcenter Nord) in Aarhus, Denmark, in June 2014, and involved 250 regular tablet users. Each person was asked to take up to 12 minutes to read and skim through the first section of that day's Jyllands-Posten, with the aim being to consider which articles to read later on that day.

Each newspaper contained 4 interstitials inserted after pages 7, 13, 19 and 25. The interstitials were based on ads from the travel industry and the food catering industry, because offers from these industries were expected to have high experiential potentials, as well as relevance, for the majority of newspaper readers. The travel ads were from Topas Travel, an organizer of adventure and activity tours, and MyCruise, a web portal for cruise offers from various cruise companies. The ads from the food catering industry were from Hungry.dk, a web portal for ordering take-away food, and Mad & Mad, a catering company targeting family celebrations.

In selecting the brands, it was important that we had access to existing advertising material, which could be moderated by OnAds to the different creative formats that we wanted to investigate. Furthermore, when it came to the creative formats, we aimed to achieve comparability across the brands.

The four creative formats chosen were:

- static; with a click to the landing page
- dynamic 1; with a picture gallery and a click to the landing page
- dynamic 2; like dynamic 1, but with additional animation (entrance effect)
- interactive; with the possibility to navigate between the different pictures in the product gallery.

In total, the study thus involved 16 interstitials (four brands with four creative formats), which were combined in four ad packages. It was possible to change between the packages at any time during the data collection in order to reach approximately the same number of respondents for each ad package.

THE TOPAS AD

The Topas Travel **static** ad was characterized by three pictures with three different travel categories (hiking, biking and active tours) next to each other. In the **first dynamic** ad, the three pictures were placed as an automatic picture gallery in the centre of the app. In the **second dynamic ad**, the pictures appeared one by one next to each other, with hot air balloons flying across the screen, and finally **the interactive version** had arrows where the respondent could move from picture to picture.



Two ads from Topas Travel the first is static and the second is interactive, where it was possible to click from picture to picture on the arrows. On the second, on top, hot air balloons fly across the screen.

THE MYCRUISE AD

The MyCruise **static** ad was a picture of a cruise destination with some describing text and a price. In the **first dynamic ad**, the picture and text were changed to different destinations, and in the **second dynamic ad**, a young and happy couple appear in the lower right-hand corner. Finally, the **interactive** ad allowed the respondent to navigate from picture to picture and destination to destination using arrows in the left and right-hand side of the screen.



Two dynamic ads from MyCruise the one on the bottom with a picture gallery, and on the top, a happy couple appearing from the bottom of the ad.

THE HUNGRY.DK AD

The **static** Hungry.dk ad featured a happy customer ordering take-away with some text above him. In the **first dynamic** ad, the man changed positions (first hungry, then ordering, then receiving the take-away) and the text changed similarly. In the **second dynamic** ad, the changes were maintained but on top, a scooter with the take-away entered the screen from the right and disappeared to the left. Finally, the **interactive** ad allowed the respondent to click through the different messages with arrows.



The Hungry.dk ads on the top, the simple dynamic ad, and on the bottom, the interactive ad, where it was possible to click to new information via various arrows.

THE MAD & MAD AD

The **static** Mad & Mad ad showed two pictures with different menus that can be ordered. In the **first dynamic** ad, one of the pictures was exchanged with text describing the menu, and the two descriptions and pictures would then change from one to the other. In the **second dynamic** ad, flags coming down from above were added. Finally, the **interactive** ad featured the two pictures from the static ad and it was possible to click on an arrow and get the describing text, together with two pictures from the menu.



Ads from Mad & Mad on the top, the static ad, and on the bottom, the second dynamic ad with flags falling down from above.

All in all, the basis for the four formats was a low cost approach, meaning that we wanted to use material that was already developed or that easily could be modified. Consequently, we are aware that both the dynamic and interactive formats offer creative opportunities which have not been reflected in this study.

DATA COLLECTION

The data collection took place over 10 days, both weekdays and weekends. In the mall, the respondents were recruited in the general mall area, led to a room not accessible to other shoppers and asked to take 12 minutes to read and skim the first section of that day's edition of the national Danish newspaper Jyllands-Posten on an iPad in the landscape position. With the aim of simulating an authentic reading situation, the respondents were left alone in a secluded area while reading. When finished reading, the interviewers conducted an interview lasting, on average, 11 minutes.



Interviewers in the corridors of Storcenter Nord, one of the leading malls in Aarhus, recruiting respondents for the interviews.

The questionnaire focused on:

- unaided and aided recall of the interstitials and of the main printed ads in the paper
- overall attitude to the interstitials
- the rating on ten different parameters related to experiential qualities
- respondents' knowledge of the brands represented in the interstitials
- news consumption habits and the demographics of the respondents

In total, 225 respondents completed the full interview, representing equally three age groups defined according to Sarah Quinn (2012) as digital natives (below 30 years old), printnets (above 45 years old) and digital immigrants (in this study, defined as respondents between 30 and 45 years old). A nearly equal number of men and women took part in the study.

The survey answers were registered using the FluidSurvey software. Moreover, to register clicks and interaction with the ad, finger-touch activity on the interstitial was logged by the OnAds servers.

RESULTS

As discussed above, the choice of the ads involved in the study were based on three criteria:

- that the offers were expected to involve an experiential potential
- that moderations (dynamics and interactivity) could be implemented at low cost, and
- that the brands and offers had broad appeal.

The study revealed that three out of the four brands were already known by a considerable proportion of the respondents. Thus, for Hungry.dk, MyCruise and Topas Travel, respectively, 40%, 33% and 23% of the respondents reported that they already knew the brands before participating in the study. However, for Mad & Mad, this was only true for 3% of the respondents.

As each of the 225 respondents was exposed to and assessed four interstitials, the data were quadrupled, resulting in a total of 900 observations. Based on this data-set, a number of relevant statistical analyses were performed. Below, we first compare the recall performance of the interstitials and the printed ads in Jyllands-Posten across the ten days of study. After this, we compare the performance of the four different interstitial formats and report the results regarding the experiential aspects and demographics.

RECALL OF THE INTERSTITIALS AND ADS FROM THE PRINTED PAPER

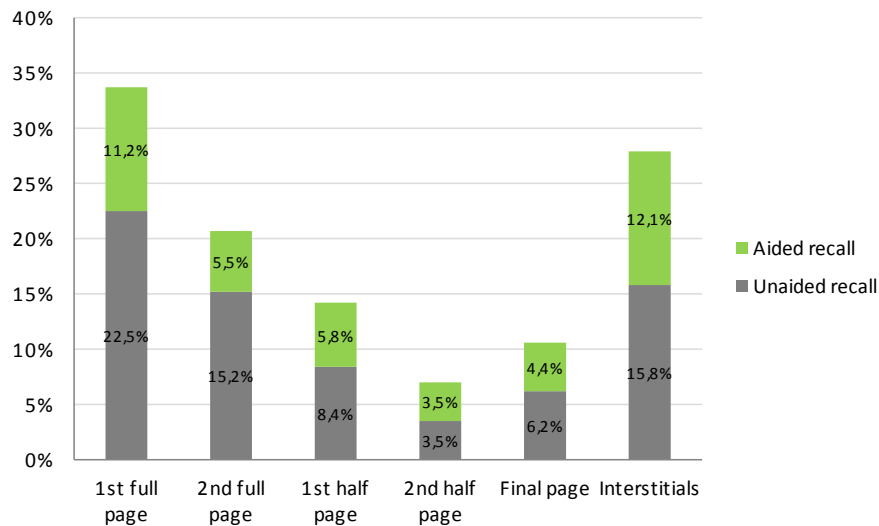
The recall was measured for the four interstitials, as well as for the five ads in the printed newspaper (on the 1st full-page, 2nd full-page, 1st half-page, 2nd half-page and a full-page ad on the final page). Some examples of the printed ads in the study are illustrated here:



Illustration of the ads included in the survey. The picture does not include the ad on the final page of section 1.

We asked about both unaided recall ("Do you remember any ads from the newspaper?") and aided recall ("Do you remember any food ads from the newspaper?"). Aided recall was however measured without showing the ad to the

respondents. The graph below shows the recall rates for the printed ads and for the interstitials.



Recall rates for the interstitials and the different print ads.

On average, the respondents recalled 17.3% of the printed ads and 27.9% of the interstitials, and the difference in recall is highly significant. In other words, the results of the study indicate that the average recall for tablet interstitials is higher than that of printed ads in the same newspaper. When comparing within the same industry, this indication is further strengthened by the fact that 14% of respondents recalled the travel print ads, whereas 23% recalled the travel interstitials (only comparing the results from the six days where the former ad was present in the paper). The other advertisers in eight out of ten of the first full-page printed ads in the newspaper were strong supermarket brands which most of the respondents would know before the study. This is probably the reason for the higher recall of the 1st full-page printed ads compared to the interstitials.

In accordance with previous recall studies (cf. Tellis, 2004), recall of the ads from the printed paper was greater for the larger ad formats (i.e. the full-page print ads) and for the first print ad in the paper. Also, in accordance with expectations, the respondents who reported that they knew the brands before being interviewed had significantly higher recalls compared to respondents who did not know the brands (and to whom these may be presumed to be less relevant). Similarly, significantly more interstitials were recalled when the brand was known to the respondents before the study. Attitudes to the interstitials were also

significantly more positive when the brand was known beforehand. Therefore ad size and ad position in the paper, as well as brand knowledge, matters when it comes to recall of an ad.

Finally, the analysis results showed that a significantly higher proportion of the respondents could recall the travel interstitials compared to the food catering interstitials, although the aided recall was higher for food catering, while unaided recall was higher for travel.

One specific print ad achieved significantly higher recall rates over all the other ads in the study. The ad was a double page spread (DPS) ad for Starmark, the leading second-hand Mercedes reseller in Denmark, and was published in the printed paper on June 10, the day before the 80 years anniversary of His Royal Highness Prince Henrik of Denmark. Prior to the birthday, the anniversary had received a lot of media coverage in both the printed media and TV, so the combination of relevance and humour in the ad resulted in a recall of 82.6%, of which 78% was unaided recall.



Starmark double page spread ad in the printed Jyllands-Posten on 10 June 2014. The ad says ‘Congratulations. We guess that you are up for an open coach tomorrow’ and the license plate refers to the prince and his age.

In comparison, the only other double page spread ad in the survey period, from the electronic retailer Elgiganten, obtained a recall of 50%, of which only 7% was unaided recall.

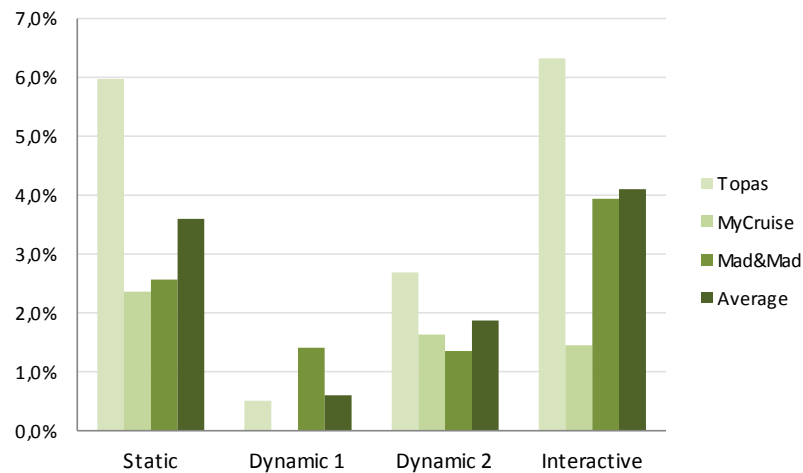


Elgiganten double page spread ad in the printed Jyllands-Posten on 15 June 2014

The double page spread printed ad format thus results in a recall much more than twice that of the full-page printed ad format.

CLICK THROUGH RATES AND INTERACTION RATES FOR THE FOUR TYPES OF INTERSTITIALS

Apart from the individually based recall and attitude measures, we registered clicks and interactions on an aggregated basis for each of the interstitials involved in the study. The figure below illustrates the CTRs for each of the four types for the brands Topas Travel, MyCruise and Mad & Mad, as well as the averages across brands.



CTRs for the different ad formats measured for the different brands

CTRs for the different creative formats ranged between 0.6 and 6.2%. For all the ads, this is many times higher than for the digital banner ad formats, which typically reach a CTR of only 0.1% (several web sources, e.g. Morrissey, 2013). Interestingly, the CTRs are generally the highest for the static and interactive interstitials. All other things being equal, it seems that interactive features can facilitate readers search for further information. That the static ads received higher CTRs than the dynamic versions may reflect that the static ad represents the well-known – and less ‘dangerous’ – format for the reader. Alternatively, the dynamic formats either pacify the readers or give the readers the information they need without having to click.

The interactive ads were also analysed for their interaction rates, measured as interactions in relation to impressions. To do this, we had to make a correction to the registered interactions as the interviewers had already showed the ads and the interaction possibilities of the ads to most of the respondents. The corrected interactions resulted in an interaction rate of 13.0% for MyCruise and 30.7% for Mad & Mad. These interaction rates are quite high compared to average interaction rates, which were measured as 4.02% by the Pointroll Benchmark Data (2012). This could indicate that the e-paper is a quite suitable platform for readers’ interaction with ads, and further research in this area would be highly relevant.

Summing up, the high CTR and interaction rates for the interactive ads indicate that interactive ads engage the finger and invite the reader to engage in ‘lean

forward mode. And on the contrary, the lower CTR for the dynamic interstitials could indicate that the reader moves into a 'lean back mode'.

RECALL AND AD-LIKING OF THE FOUR TYPES OF INTERSTITIALS

As described above, we measured the effects on recall and ad-liking and the experiential ratings of the different levels of digitalization (static, dynamic and interactive). Our analyses detected no significant differences between the four levels of digitalization. In other words, we cannot conclude that more dynamic and interactive formats would lead to higher recall or a higher preference compared to static ads.

When compared to the differences in CTRs reported above, it is remarkable that no significant differences in recall and ad-liking were observed between the four levels of digitalization; this is also in contrast to other surveys conducted over the last few years (Axel Springer, 2013, and IAB, 2012). Possible explanations for this could be:

- The relatively low relevance of the brands and offers for the audience within the two industries. Supermarket ads would, for instance, have higher relevance than take-away ads.
- The relatively low use of the dynamic and interactive opportunities, due to the fact that comparability between the different ad formats was given higher priority.

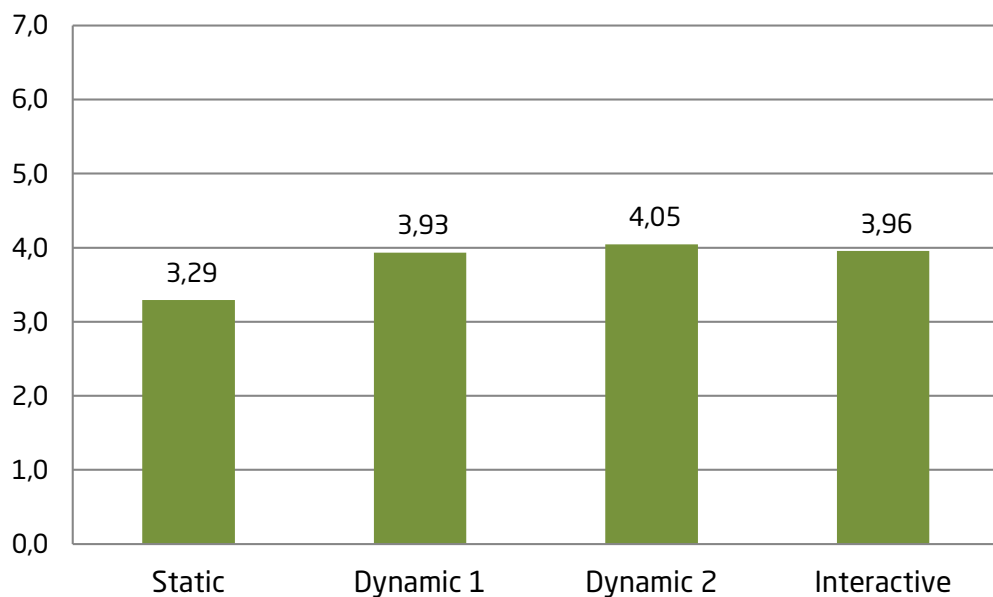
Given the observed differences in the CTRs, it would be very interesting to replicate the study with readers who work in that market or with brands with a more general appeal, e.g. fast-moving consumer goods. An alternative study with higher levels of interactivity and dynamics in the ads would also be relevant to carry out.

EXPERIENTIAL QUALITIES AND AD-LIKING

We also studied how the respondents ranked the ads on different experiential parameters, such as how entertaining, engaging and informative the ads were, how much the ads stimulated interest in the brand and how much the respondent liked the design of the ad.

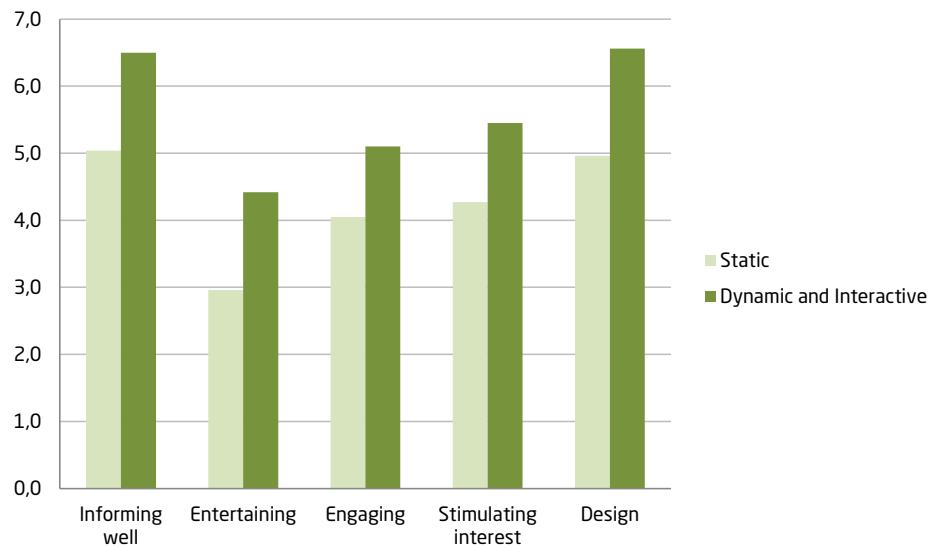
Analysing the data in an overall statistical model did not indicate significant differences between the four different ad formats, but nevertheless it raised a number of indications which are described in the following.

Across the four brands, there was an indication that dynamic and interactive ads are perceived as more entertaining than static ads. This is illustrated in the following graph, where these formats are rated around 20% higher than the static format.



The dynamic and interactive ads were generally considered to be more entertaining than the static ads.

Even though the same dynamic and interactive elements were applied in the different ads, the MyCruise ad showed strong indications that the dynamic and interactive formats were found to be more informative, entertaining and engaging, and also stimulated more interest; they also rank higher on design compared to the static ads, as shown in the below figure. There was no clear difference between the dynamic and interactive formats.



MyCruise ad ranking on the experiential parameters

The Hungry.dk ad had the same indications, although not as strong as the MyCruise ad, while the different formats of the Topas Travel and the Mad & Mad ads almost ranked equal on the above parameters.

In other words, dynamic and interactive ads generally seem to be more entertaining than static ads, and the right creative artwork is also likely to make dynamic and interactive ads more informative and engaging, and can stimulate more interest in the brand.

DEMOGRAPHICS, READING HABITS, ETC.

Finally, we analysed potential differences between the subgroups of the respondents, as regards recall, overall attitude and experiential qualities.

The analyses revealed that women were significantly more likely to recall the interstitials (31% for women vs 24% for men). Also, compared to men, women were significantly more positive towards the digital interstitials, felt significantly more entertained and expressed less irritation.

The analyses also showed that women found the Topas Travel interstitials significantly more informative than men, and that they rated the MyCruise interstitials higher on all dimensions, except for informativeness. For the catering interstitials, there were no significant differences between men and women on the experiential and attitudinal dimensions.

As regards age, the tests revealed that the higher the age of the respondent, the more positive their overall attitude to the interstitials was. However, age did not significantly influence recall, not for the interstitials, nor for the printed ads.

CONCLUSION

Visiolink and Aarhus University, in cooperation with Jyllands-Posten and OnAds, carried out a quantitative survey to investigate the effects of different creative ad formats, inserted as interstitials, on the e-paper platform of Jyllands-Posten. The survey was conducted based on interviews with 225 respondents over ten days in Aarhus, Denmark.

Interstitials were generally measured as having a higher recall among the respondents than the full-page and half-page ads in the printed paper. Overall, interstitials achieved a recall of 27.9%, while the figure for the printed ads was 17.3%. There was in the survey period two double page spread ads in the printed paper, and these ads were recalled with amazingly high rates (both over 50%).

We also tracked the Click-Through-Rates (CTRs) and interaction rates for the interstitials. The CTRs were generally registered to be between 0.6% and 6.2%. Surprisingly, the two dynamic ads with some degree of animation had the lowest CTRs, while the interactive ad had the highest CTR, with the static ad in second place. Interest in interacting with the interactive ads was confirmed by looking at the interaction rates of these ads, which was 21.5% on average. This may indicate that the e-paper is a suitable platform for interactive ads where the reader engages with the ad in a 'lean forward mode', while dynamic ads with different degrees of animation encourage the reader to 'lean back'. Contrary to what we expected, the difference in CTRs was not reflected in the recall rates and overall ad-liking for the four different formats. However, there was an indication that dynamic and interactive ads are perceived as more entertaining than static ads.

The fact that both the double page spread ads from the printed paper and the interstitials performed significantly better on recall calls for further investigation and for further development of the technological possibilities for interactive advertising with e-papers. Such development should support a large variety of the many different creative interactive formats, and furthermore it should be applicable for all technical platforms and devices.

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