3D Segment Targeting Across Markets: Combining Behaviour, Demography and Attitudes

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Introduction

This paper discusses a programmatic proof of concept that was instigated in discussion between Time Inc. (UK) and GfK that both explores the 3D enhancement of digital segments in one market (United Kingdom) as well as the potential creation of targeting segments across markets (United Kingdom and United States). The paper includes primary research as well as, and probably more importantly, a discussion on the operationalization of such an offering. There are four main sections of this paper:

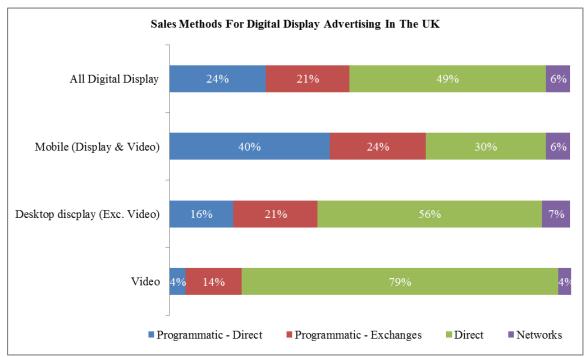
- (1) Primary survey conducted to collect more granular consumer based data for enhanced targeting
- (2) Approach to segment enhancement in the UK
- (3) Expanding the discussion to global programmatic for Time Inc. in the UK and the US
- (4) Next steps in our work real world application and evaluation

Before presenting the detail of the survey and approach, it is important to take a step back and consider the bigger targeting picture for magazines and where we are today.

Context: Where we are today

The opportunity to reach consumers through magazine media brands has been expanding as new platforms have been introduced into the landscape. At the same time, the measurement and the ad targeting challenges have rapidly grown more complex.

As illustrated in the graph below, almost half (45%) of UK online display ads in 2014, worth just under £1 billion, were bought through 'programmatic' technologies, according to The Internet Advertising Bureau (IAB) UK's "Media Owner Sales Techniques" study. This is up from 28% in 2013. In particular, programmatic for mobile is driving this growth with an increase from 37% to 64% in that one year period.



Source: IAB UK 'Media Owner Sales Techniques' (MOST) 2014

Why does this matter to publishers? This growth trend in programmatic targeting is expected to continue with 70-80% of digital display forecasted to be traded in such a fashion by 2018. More specifically, this trend is more pronounced in our core advertising sectors as observed by the IAB in their study - retail, telecommunications and finance. Given this steady growth in programmatic targeting, publishers such as Time Inc. in the UK consider it imperative to create best practices and effective means to leverage this important ad placement approach.

Moreover, as a global publisher, Time Inc. recognises the significant opportunities to provide efficient cross-market targeting for global advertisers. In fact, as a first step, in February 2014, Time Inc. partnered with Google to launch the Time Inc. Global Exchange, one of the largest premium programmatic ad exchanges. The exchange gives marketers programmatic access to Time Inc.'s global digital footprint of 155 million consumers. Andy Blau, SVP & Group GM, Time Inc. Advertising Sales, recently said:

"We've been focused on programmatic for some time now, but with the launch of the Time Inc. Global Exchange, we're betting on the untapped potential Time Inc. has in this space."

Setting the Stage: Time Inc. (UK)

In order for Time Inc. (UK) to remain a key player in the programmatic market and to retain its premium credentials they need to leverage their understanding of the consumer.

The side effect with programmatic is that we no longer talk about consumers we talk about data points i.e. the number of impressions, sessions or searches made by a consumer – or maybe more appropriately by some device. However, transactional based metrics actually are not a new phenomenon; publishers have always had data like this e.g. Audit Bureau of Circulation (ABC), which measures number of copies sold rather than people/readers.

Time Inc. (UK) believes there is a place for both – transactional and consumer based metrics - to work simultaneously. As Marcus Rich, Time Inc. (UK) CEO, remarked in a recent interview:

"We are a magazine brand business. The platform is irrelevant. We should start from the point of the audience, and the content, the platform is only the best mechanism at that point for that story."

Time Inc. consider that the consumer is central to everything from print to online through to mobile. They assert that their UK programmatic offering provides advertisers with access to a portfolio of brands delivering audience solutions that are scalable, responsive, customised and targeted. They provide actionable insight into millions of consumers at scale reaching over 7.9 million monthly unique digital visitors in the UK (comScore July 2015).

Having a programmatic play is crucial for any media owner to maintain strong market position in an ever competitive market. The opportunity for Time Inc. (UK) is to develop a unique and credible selling point. This is why they believe it is time to 'put people back into data' by combining consumer understanding and traditional research techniques with programmatic data segments based on online behaviour, in order to address knowledge gaps e.g. offline behaviour, and to create a fully rounded ad targeting solution.

Time Inc. (UK) and GfK have collaborated to work on a key target audience for advertisers - mums. This is a classic example where a standard target audience cannot be fully replicated via Data Management Platform (DMP) data segments because they are based on behaviour (terms searched for, content viewed, sites visited) rather than consumer knowledge (demographics, attitudes, offline behaviour, etc.).

The basis for this initiative is segment work conducted in the United States using GfK MRI National Study data to create segments already on-ramped and in use. GfK MRI has been providing data for online segment enhancement since March 2014. Given that GfK MRI is already situated in the programmatic space in the US, a potential extension of their collaboration with Time Inc. in the UK would be to explore global programmatic opportunities for clients interested in targeting across markets. There is more on this topic later in this discussion.

Primary Survey Data Collection – GfK

GfK CrossMedia Link Panel

One of the assets that GfK owns in the UK is the GfK CrossMedia Link Panel. This is a single-source cross-device measurement panel first introduced by GfK in the UK in 2014. The GfK CrossMedia Link Panel in the UK currently

¹ Time Inc's Global Multi-Platform Audience is reached by adding the World Wide Media Metrix DeskTop/PC audience + Mobile exclusive audiences from Media Metrix Multi-Platform data from those regions where comScore has published estimates (i.e. US & UK). All data for this metric come from July 2015 comScore.

includes measures around 4,500 individuals across a range of devices (PC, smartphone, tablet). A third of these individuals are tracked across multiple devices using GfK's LEOTRACE technology and, consequently, around 6,000 digital devices are measured. Data collected through the GfK Panel include passively-tracked site visitation. GfK collects additional information on each respondent including demographics and other consumption-based data through the use of surveys. The panel numbers for both people and devices are constantly re-evaluated and will grow in the coming months.

GfK CrossMedia Link – Survey Method and Results

In collaboration with Time Inc. (UK) in August 2015, GfK fielded a survey including multiple psychographic and consumption based questions to its CrossMedia Link Panel. The objective of this survey was to amplify the amount of information per panellist that we would have access to for segmentation. As mentioned above, the inspiration for this survey work was the digital segment work that GfK had already done in the US. A total of 40 questions were included in this UK survey. Below are several examples of items (all asked on a 4-point agree/disagree scale) included in the survey:

- A celebrity endorsement may influence me to consider or buy a product
- I will gladly switch brands to use a coupon
- I think of my mobile phone as a source of entertainment
- I'd rather take a few weekend holidays than one long holiday
- I must admit I wear designer brands partially to impress other people

All of these items comprise larger sets of psychographic batteries included in the GfK MRI Survey of the American Consumer which are used to load the 44 segments mentioned above onto a DMP in the US. It is important to note, Time Inc. in the US already accesses the 44 segments made available by GfK MRI.

A total of 1615 completed surveys were collected over the course of three and a half weeks of data collection. While the survey was initially opened in mid-August, GfK made the decision to keep it open through the first week of September to allow for increased participation from people away on holiday in late August. The raw survey data was weighted to population figures for the total, 16+ online population from ONS 2014 Mid-Year Population Estimates, BARB Population Estimates 2014/NRS 2014, and the GfK UK Internet User Profile Study. As a reminder, other than marital status, the demographic information was provided by panellists of the GfK CrossMedia Link panel in a separate survey.

Panellists spent, on average, a little more than 9 minutes completing the attitudinally-focused survey. There is also information on what device each respondent completed the survey: about 60% of respondents completed their survey on a PC/laptop, 28% participated on a mobile phone and about 12% participated on a tablet.

The gender split of the survey respondents is 49.6% male and 50.4% female.

Chart 1 depicts the age distribution of our respondent pool. The average age of our survey respondents is just under 43 years of age.

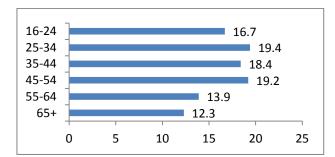


Chart 1: Weighted Sample Age Distribution

A little more than half of participants, 54.4%, fall into the ABC1 (more managerial) social grade, while the remaining 45.6% fall into the C2DE (more manual working) classification. The marital status of our respondents is split almost exclusively between married (42%) and never married (43%).

Time Inc. UK decided to focus on a mums segment for the purposes of our discussion. Approximately 36% of our survey participants have at least 1 child. And of those participants with children, 42% are women, therefore mums. In targeting mums, this group of respondents and their accompanying attitudinal and demographic information would be available for more specific targeting.

Table 1 below depicts the top and bottom 2 responses for a set of attitudinal items that Time Inc. UK indicated corresponded to a set of segments they had already isolated through behavioural data. The data is shown for total respondents; however this can be further filtered on a base of mums to use for enhanced targeting.

Table 1: Responses to 11 Attitudinal Items - Comparing UK vs. US Data (Percent of Total Respondents)

Attitudinal Item	GfK UK Survey Using CrossMedia Link Panel Summer 2015		GfK MRI (US) – National Study Data Fall 2014 ² Report	
A A A A A A A A A A A A A A A A A A A	Top 2 Box (Agree)	Bottom 2 Box (Disagree)	Top 2 Box (Agree)	Bottom 2 Box (Disagree)
A celebrity endorsement may influence me to consider or buy a product	26.7	73.3	20.4	79.6
I will gladly switch brands to use a coupon	79.3	20.7	48.9	51.1
I regularly eat organic foods	27.0	73.0	39.5	60.5
I always check the ingredients and nutritional content of food products before I buy them	57.3	42.7	59.0	41.0
I think of my mobile phone as a source of entertainment	67.3	32.7	50.23	49.8 ³
I am willing to pay more for a flight in order to travel on my favourite airline	29.5	70.5	31.4	68.6
I always look for deals when booking my hotel accommodations ⁴	86.8	13.2	NA	NA
I'd rather take a few weekend holidays than one long holiday	43.8	56.2	54.1	45.9
I must admit I wear designer brands partially to impress other people	19.3	80.7	19.2	80.8
I often use natural or organic beauty products	33.4	66.6	34.0	66.0
I am influenced by fashion and trends ⁵	35.3	64.7	30.4	69.6

The first step was to compare the distribution of responses in the UK to the corresponding US distribution; that way we could evaluate potential differences in the attitudinal profile of consumers in each respondent market.

Given that the GfK MRI data is collected from a general population survey of adults, the US data was initially run on three different bases - any internet usage as well as any tablet ownership and cell/mobile phone ownership - to explore potential differences. In all but one case in Table 1, the US data compared uses a base of any internet usage (the scores for the two other bases were quite similar to the any internet usage base).

In comparing the responses across markets, one can see that some attitudes are quite similar and others - for example, attitudes toward coupon usage and even consumption of organic foods - vary quite dramatically. Perhaps not surprisingly, in

 $^{^{\}rm 2}$ At the time of this comparison, the Fall 2014 report was the most current data available.

The GfK MRI data run for this item is on a base of "own mobile phone".

⁴ The original GfK MRI item is I am willing to pay more for a flight in order to travel on my favorite airline. The item was changed inadvertently in fielding the UK survey. The data, therefore, cannot be used in parallel to the US based information.

The original GfK MRI item is *I am influenced by what's hot and what's not*. The statement was modified to fit better with British English.

general the attitudes of consumers in these two markets are quite similar with one another or at least directionally comparable.

Bringing It Together: Linking the Time Inc. (UK) Segments with the Consumer-Based Data Collected by GfK

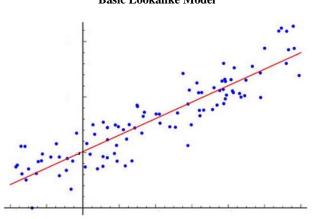
The consumer-based data collected through the GfK CrossMedia Link Panel will need to be incorporated into a DMP so that it can be used to enhance the Time Inc. (UK) ad targeting segments already available there.

The process of on-ramping, sometimes called on-boarding, is the transfer of data gathered from a third party to an existing data set. Often this is offline data being placed into the digital realm or, as in this situation, a digital collection of information about offline behaviour that needs merging.

Time Inc. (UK)'s DMP, Krux, is where the current ad targeting segments have been developed and implemented. Incorporating the GfK CrossMedia Link Panel survey data into this DMP involves using the survey respondents as seeds for the data connection; this information can then be allocated across the segments through a look-a-like process. Respondents to the survey can be matched on Krux in a number of ways: either through cookies, IP addresses, email address, API integration between the CrossMedia Link Panel and Krux, site visitation, etc.

This match allows for the seeds on Krux to be identified and the relevant survey data can then be integrated on to those matched respondents. With these respondents, and through analysing their online behaviour, a lookalike match is run through Krux so that we can develop full sized data enhanced segments that will be valuable to advertisers.

The lookalike methodology works in a similar way to other digital campaign targeting and simply highlights other people that are similar to a known user - the seed. An illustration of this is below. This is a basic lookalike model where the closer the users (dots) are to the diagonal line the closer aligned they are to the seed's behaviour and more likely to be classified as a lookalike.



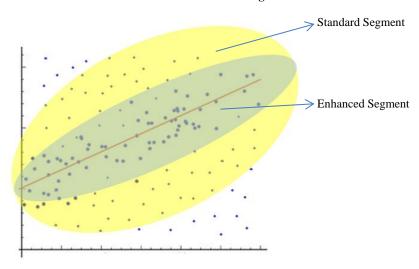
Basic Lookalike Model

The lookalikes are derived from online behaviour matches. We have identified those users that are seeds already and incorporated the enhanced data from the CrossMedia Link Panel. The analysis then looks at their behaviours that most highly rank within the group and matches up with lookalikes who show similar behavioural trends.

For example, in the seeding group there will be a number of online users that can be classified as being mums. Through analysing their online behaviours, we will be able to match other users with similar traits and can incorporate them into the enhanced mums segment on the basis that they are likely to be mums. The enhanced mum segment will allow better ad targeting for consumers. Any online campaign targeted at the enhanced segments will be more cost efficient and effective for the advertiser.

Building on the image above, below we include an image illustrating the benefits of an enhanced segment.

Lookalike Model With Enhanced Segment



The wider shaded area would be the original segment that Time Inc. (UK) can create in Krux (i.e. based on site visits and key word search). This would create a pool of targetable users as shown – for example a current mums segment within the Krux system.

However, when the segment is enhanced it would be possible to better match users as more information is known; the lookalike model is in a better position to select a stronger segment – the narrower oval shaded region. i.e. an enhanced mums segment. This allows the DMP to select a much more refined and effective segment for advertisers to utilise based on the concept that the more data we incorporate the better the ad targeting will be.

At the time of this paper, the segment enhancing process has not yet been executed. Individuals from Time Inc. (UK), Krux and GfK are coordinating the steps that are required to implement the enhancement. Once this is achieved, the 3D segments will be ready for programmatic application.

Conclusion and the Global Programmatic Prospect

The work done in the UK provides the links necessary to enhance Time Inc.'s Global Exchange by targeting not just across platforms, but now against specific audiences globally. In the US, many of the GfK MRI segments are enabled and available through the DMP for targeting.

Working across the DMPs and including the same segment information across markets enables the market to plan and buy their campaigns on a global scale. This would enable any advertiser, in any location, the opportunity to engage a large scale, targeted ad segment across multiple platforms owned by Time Inc.

As "One" Time Inc. with over 90 brands reaching millions of people around the world – they can now meet increasing programmatic buying demand worldwide by providing access to a wider variety of demographics across a range of platforms. This demand has driven significant growth:

- Preferred Marketplace deals increased over 450% in 2014
- Mobile deals expanded by 750%

Building on the success of Time Inc.'s Global Exchange, earlier this year Time Inc. introduced a Print Programmatic solution that presents advertisers with distinct and scalable audience segments, complementing digital programmatic and providing a fully cross-platform solution for turnkey, audience buying. Time Inc. believes the addition of print to a programmatic offering leads to the possibility of using global enhanced segments across multiple media giving the market the opportunity to run truly global, multi-platform campaigns.

Next Steps in Our Work

As previously indicated, at the time of this paper, the segment enhancing process has not yet been executed. Individuals from Time Inc. (UK), Krux and GfK are coordinating the steps that are required to implement the enhancement. Once this is achieved, the 3D segments will be ready for programmatic application. The plan is to test the 3D segments on a live advertising campaign in the UK in order to compare and contrast the results between the behaviourally defined target and the new 3D segment.

In parallel, Time Inc. UK and US will continue to collaborate and leverage these segments to build out a more robust offering for global marketers.

As a global publisher, Time Inc. is committed to understanding how audiences travel with their content be it on print, desktop, mobile or video. They consider it vital to understand their behaviour and content consumption across different platforms and across the globe. With that said, while the paper demonstrates their ability to target specific audiences, how to measure and estimate global audience reach and delivery across platforms continues to be a challenge. Current estimates bring together disparate data sets, from different research partners, and Time Inc. think there's a great opportunity for global industry collaboration. A single global source, you say? Maybe, maybe not - but let's at least start to think about what there is, and the gaps that need filling.