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The role of data integration in integrated marketing communications planning

Dawn Orr and Jon Cano-Lopez

Abstract

Media fragmentation has diluted the impact of most media. To achieve even average coverage across all customer groups involves buying multiple spots in diverse channels. Conventional media metrics have not helped advertisers to track these elusive consumer groups. Media-neutral planning makes even greater demands on data capabilities.

To address this growing complexity and decreasing effectiveness, marketers need to use data characteristics to define their choice of media, rather than profiling the consumers of media that have already been planned. In this way, a better fit can be achieved between the target audience and the media it uses. For brands with multiple customer franchises, this may be the only way to increase ROI on their marketing.

The problem with averaging

If Lord Leverhulme had possessed a database of Lever Bros customers, he might never have been forced to admit that, although he knew half his advertising budget was wasted, he did not know which half. The answer could have been found by plotting two key variables — the index of media coverage across the total customer base and the relative value of customer deciles. As Figure 1 shows, half of the expenditure on media has gone towards achieving coverage of customer groups that are essentially unprofitable.

The way in which media has historically been planned and bought by advertisers — or packaged and sold by media owners — has been based on the mass-market model. Since the audiences claimed by media owners were broad, the coverage sold to advertisers was averaged out, either to avoid having unsold inventory in unpopular spaces or through the simple regression-to-mean effect of having a mass audience. By delivering an overall average of exposure across the population, money is effectively being left on the table. As this model also identifies, there is a significant gap in the level of exposure of the most valuable customer groups to the media being used.

Averaging is difficult to avoid in media planning because of the inverse relationship between consumer income and time available. The most affluent consumer groups — who therefore translate into the most valuable customer segments — are also those who have the lowest
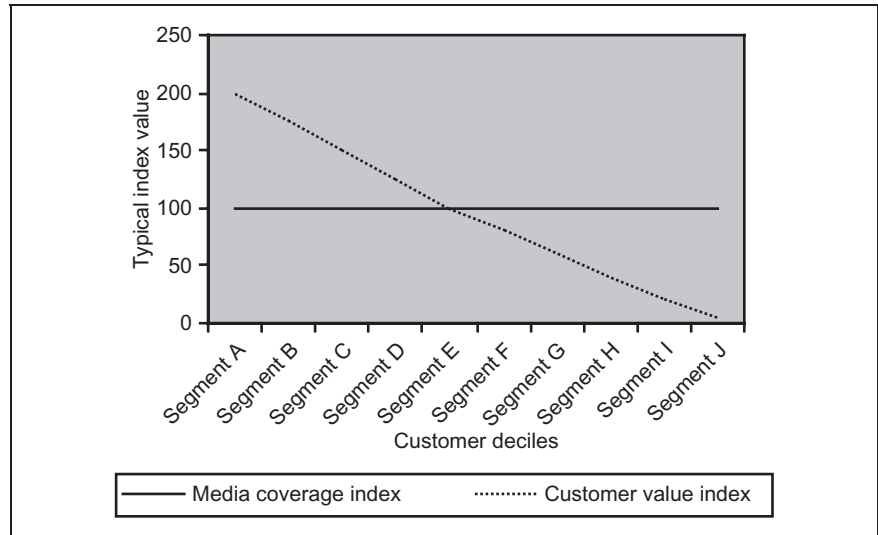
Figure 1: Media indexing and customer exposure

exposure to most media. Figure 2 shows a typical index score for TV advertising which demonstrates the problem.

Upweighting of media schedules to achieve higher impacts among those top consumer segments rapidly hits the law of declining returns. Costs increase almost exponentially due to the high demand and low availability of space reaching these groups. At the same time, mass media over-deliver against the less valuable consumer groups. What Lord Leverhulme did not know was that probably 75 per cent of his advertising budget was wasted.

The decline of media impact

To make matters worse, media fragmentation has diluted the impact of most media. In 30 years the volume of TV commercials seen in-home has nearly doubled (see Figure 3). Put another way, the impact of each commercial has halved over the same period. In the 1980s ITV had a 49 per cent share — by the 2000s this had fallen to below 30 per cent. In multichannel homes it is below 21 per cent.
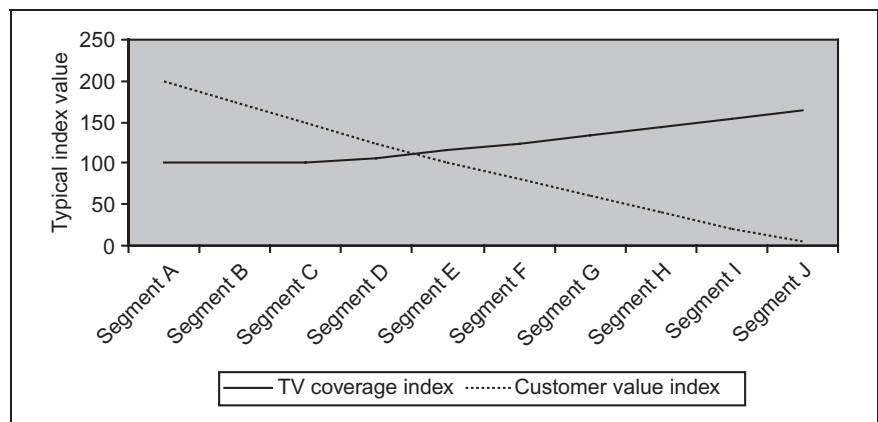

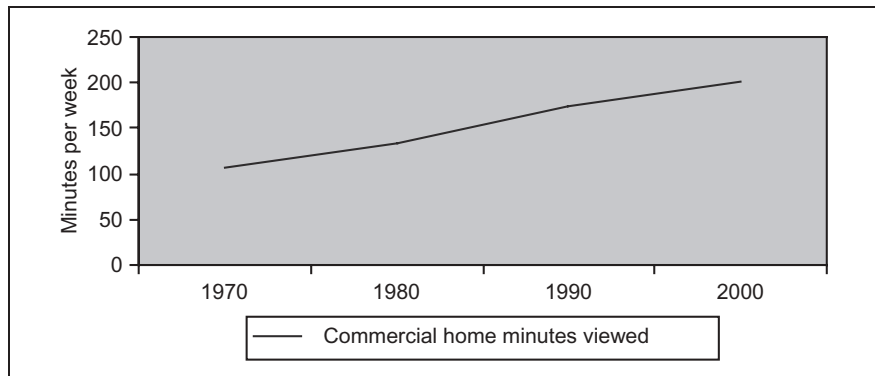**Figure 2:** TV index against customer value

Figure 3: Growth in TV exposure

A single-media schedule, such as one focusing solely on television, is no longer a straightforward buy. Alongside the three terrestrial commercial TV channels in the UK, there are 40 satellite, cable and digital TV channels measured by BARB plus dozens of unmeasured channels. To achieve even average coverage across all customer groups involves buying multiple spots in diverse channels.

Optimising a media schedule to achieve the required number of impacts in TV will therefore involve extensive data analysis and planning. The final laydown is likely to be an array of channels, day parts and rotations, each of which has its unique cost per thousand for that audience. All of those data need to be assembled, analysed, interpreted and presented in far more complex ways than before.

Campaign planning requires significant rethinking

Advertisers are facing considerable challenges in managing their campaigns. And yet they have been very slow to change their marketing processes in order to confront the new realities of the media landscape. In more than 50 per cent of campaigns managed by UK-based media independent Billetts, for example, the media mix had been determined before campaign objectives had been defined.

This was visible in one large US-based credit card company which Acxiom worked with. It had a clear profile of its target prospects, but was deploying a nationwide media plan. Yet the brand awareness index for customers in Seattle was 400 compared to 125 for customers in Atlanta. So why was this being ignored in its advertising budget allocation? One reason was that among those segments with a 400 index, the highest media coverage index it could achieve was 125. Optimising its media buying was a difficult challenge.

The problem with media planning

Media fragmentation has been a key factor undermining the efficiency of mass-market media strategies. In addition to the explosion of channels in television, there has been a decline in the availability of audiences via other channels. In 20 years, 12 million daily newspaper readers have been lost in the UK and only 60 per cent of the population now read a newspaper, compared to 75 per cent in 1980. Since its peak in the 1980s,

even the tabloid press no longer has its former grip on consumers (see Figure 4).

Media metrics have not helped advertisers to track increasingly elusive consumer groups. Measures of press exposure are only 'average issue' counts, for example. They do not distinguish new from repeat readers, and cannot track where in the issue an ad is more likely to be viewed.

The main strategy adopted by advertisers in the face of the declining efficiency of mass-market strategies has been to divert budgets from above-the-line media into direct marketing. In the USA, the proportion of marketing budgets spent above the line in 1990 was 70 per cent — by 2000, this had fallen to 30 per cent. Direct mail has been one of the biggest beneficiaries of this shift — expenditure in the USA rose from €39,700m in 1999 to €40,042m in 2004.

Accountability leads to DM growth

One of the major benefits of a DM-led marketing strategy is the increased accountability of expenditure. Using simple response tracking techniques, it is possible to assign each pound of media expenditure to a specific position, time slot or mailing cell. Direct mail also achieves a better fit between the index of coverage and the profile of customer value (see Figure 5).

A key difference between the fit of direct mail to customer value deciles and that achieved by TV advertising is that mailings tend to over-deliver against customer groups whose value is growable, rather than in
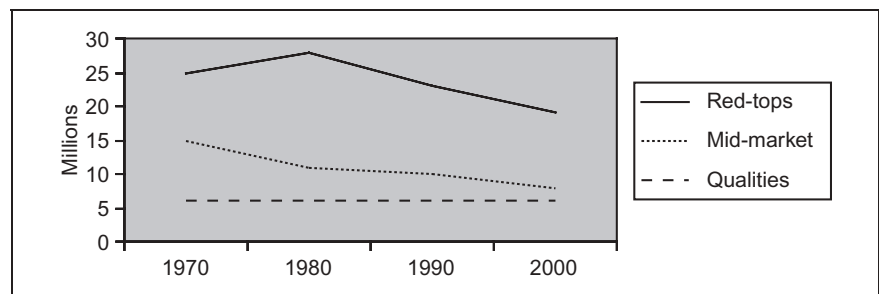

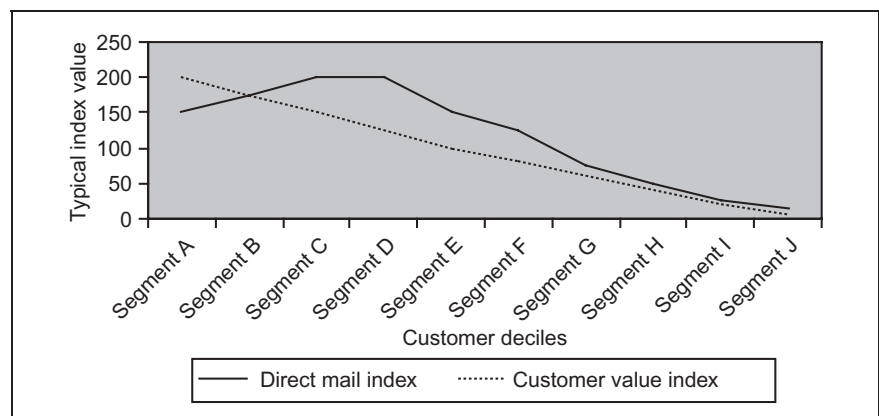**Figure 4:** Decline of UK newspaper readership

Figure 5: Direct mail index against customer value

decline or static. Money spent on marketing to customer segments with a future is an investment, rather than wastage.

The challenges of managing customer data effectively in order to drive more accurate direct mail activity are well understood. The resources required to plan, manage and execute marketing activity in this single channel are considerable. They also invariably operate outside of the marketing domain responsible for broadcast media. This is one of the biggest structural hurdles in the way of more effective media planning and buying, for two reasons:

Integrated marketing requires integrated planning

— integrated marketing communications require that all routes to market are assessed, budgeted for and executed through common systems and unified management processes
— integrated marketing communications represent one of the key data management challenges of the decade, yet many media buying agencies have little or no exposure to DM skills, assets and resources.

The integration of channels has focused on improving the efficiency of media that have usually been specified already as a result of the budgetary process or pre-existing strategies. Advertisers are now looking to go one step further — towards the definition of marketing activity based on customer insight. This process, usually called media-neutral planning (MNP), makes even greater demands on data capabilities than integrated marketing.

MNP is defined by the Chartered Institute of Marketing's Canons of Knowledge as 'A customer-centric, inclusive and merit-based review of media options during marketing communications planning.'[1] This puts data at the centre of the process and calls for new processes to be adopted. As Kevin Bishop, UK marketing director at IBM, has said: 'Planning the right approach for each [type of customer] has to start from an understanding of the customer, not a preconceived view of the communications media.'[2]

Central to achieving customer-insight-driven media planning is the question of how to unify the datasets involved and apply them across each media outlet. A significant stumbling block to integration of campaigns across media has been the isolated research techniques used in each channel. UK advertisers are notably dependent on the research provided by media owners themselves, even where this often serves the needs of the media owner better than those of advertisers.

Segmentation provides cross-media currency

A significant opportunity exists in this space to use commercial segmentation systems as the common currency across all media. Derived from combinations of Census, lifestyle and financial data, systems like Personicx from Acxiom allow codes to be applied to hard datasets, such as customer databases, and also market research studies. The result is that indexing against target segments can then be planned accordingly, selecting the media with the highest index within parameters created by allowable cost of acquisition, cost per thousand, predicted response rates, etc.

A further benefit of commercial segmentation systems is that they

allow advertisers and their agencies to visualise the target audience. This is especially useful for message creation. Integrated marketing has often been taken to mean the distribution of a campaign theme, look or tone of voice that was created above the line across all channels. Using the insights from a segmentation system, it is possible to create campaigns that are integrated around the interests and behaviour of the target audience. This helps to deliver against the growing consumer demand for relevance and the need for brands to reflect what they know about their customers.

Increase relevance and identity opportunities

As a further benefit, the same segment codes used to define the media schedule can be put to work across the enterprise. Retail-based organisations have been looking for ways to identify and respond to customers face to face that align with those customers' expectations, for example. If those expectations have been created through advertising and marketing initiatives, then front-office actions should reflect the same insights. Integration of segmentation systems into retail outlets — or the call centre, online presence or even sales force — is a logical extension of their use across all media.

Segmentation systems can also identify important features of the customer base. Using a single dimension to segment customers often exposes one group as being of the highest value. When multidimensional segmentation is applied, it is usually found that this value is distributed across multiple groups.

This shift in insight often results from considering purchasing activity within a category as a whole (multidimensional), rather than just purchasing of the organisation's products or services in that category (single dimension). Commercial segmentation systems, especially those which include direct variables on buying behaviour like Personicx, can identify new opportunities to market to customer groups that have previously been neglected. Instead of having one homogeneous segment of high-worth customers, most companies find they have a multiple franchise with potential to purchase spread across many groups (see Figure 6).
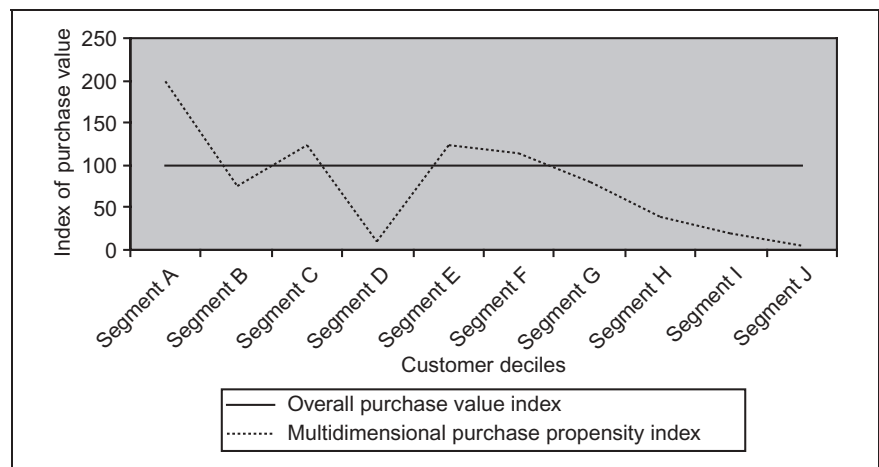

Figure 6: Multi-franchise customer profile

Towards one-to-one integrated marketing

Mapped against media options, this multiple customer franchise is usually best reached through integrated marketing which deploys a variety of media, each of which has the best index score against the individual franchise groups. Although the buying of such campaigns may be more complex than mass-media laydowns, using the segmentation code as a common currency for each channel keeps the process aligned to the target.

Segmentation also takes a lot of the guesswork out of the process of media planning. Classification systems map against postcodes, which means they can be applied to any dataset which is geo-coded in this way. Terrestrial TV regions, for example, are aggregations of postcodes. By analysing the penetration of specific clusters within each region, it is possible to identify where advertising would be most effective at reaching the required profile.

Apply precision to media planning

If individual-level data are available, the process becomes more precise. Subscription data from satellite or cable broadcasters can be segmented with a flag applied to every individual or household. And where this dataset has not been released, other sources can provide virtually the same insight.

Lifestyle data surveys routinely ask respondents about their cable and satellite subscription. As Figure 7 shows, these responses can be indexed to show over- and underrepresentation of non-terrestrial viewing within each segment, in this case the Personicx classification.

In this example, the cluster with the highest index for each type of subscription is shown, together with the cluster having the lowest index on all subscription types and the index for subscriptions across all clusters. So cluster B101 shows the highest index for digital satellite subscription, with cluster C103 having the highest index for analogue
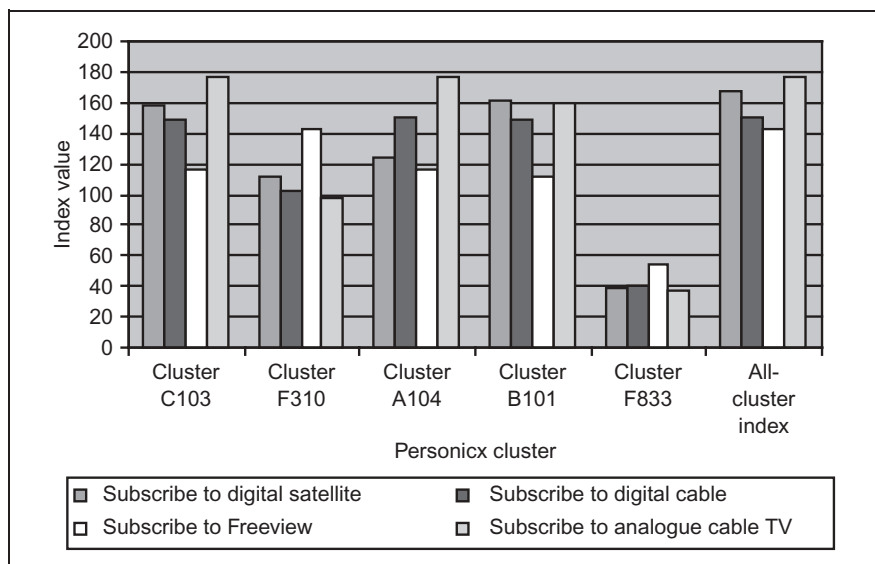
Figure 7: Media consumption by Personicx cluster

cable TV, cluster F310 the highest for Freeview and A104 the highest for digital cable. By matching these groups to high-value or growable customer segments — this can be determined by classifying customer value deciles with the same Personicx clusters — the media plan should become optimal.

Integrating marketing activity by using segmentation codes as the point of integration is a quick-and-dirty way forward. It has one significant advantage, in that it does not require the underlying datasets to be integrated, only that they are capable of having the segmentation code applied and permanently recorded.

Multi-channel data

As media becomes more interactive and targetable, however, this is unlikely to remain a satisfactory solution. Most organisations are already multichannel in the way they do business, leading to the creation of multi-source data. Until recently, the volume of data being captured and held has been increasing faster than the ability to process them.

Moore's Law holds that data density has doubled every 18 months for the past four decades. Digital channels have most recently fuelled this growth, with clickstream data bringing vast volumes of data into organisations. Experience of commercial data services providers shows that the amount of data under management has actually increased fourfold every year for the last 20 years. Most companies are struggling to convert these raw data into any kind of information, not least because of the challenges of processing them.

As a data owner, Acxiom has faced this issue itself. The annual refresh and rebuild of its commercial data repository InfoBase used to take three-and-a-half months using mainframe computing. With a move to SMP clusters, this was reduced to 26 days. But a step change has been achieved by the introduction of a grid-computing network. Processing times have increased by a factor of 60, while the company has been able to slash its capital equipment budget by as much as 85 per cent. Instead of processing 4–8 million records an hour, Acxiom can now process 300 million records an hour. That means InfoBase can be fully updated in just three days.

Customer data integration

Using this technology, there is no longer any technical barrier to the integration of multi-source, multichannel datasets. Even where marketers are active in real-time media, such as the web, the processing speed means they can carry out customer data integration (CDI) tasks within much shorter cycle times than ever before.

There is one additional step that can make CDI both easier and capable of being carried out without having to invest in a permanent, unified data warehouse environment, which can be prohibitively expensive. Until three years ago, the applications underpinning customer data integration were 40 to 50 years old and were based on string matching. AbiliTec is a knowledge-based data-linking technology. It allows data marts to continue as standalone operations, as long as they have been coded with the 16-digit AbiliTec links.

It solves the data integration issue because data can be matched using the codes without having to be transferred and managed within a common environment. Updates and enhancements can also be carried out more
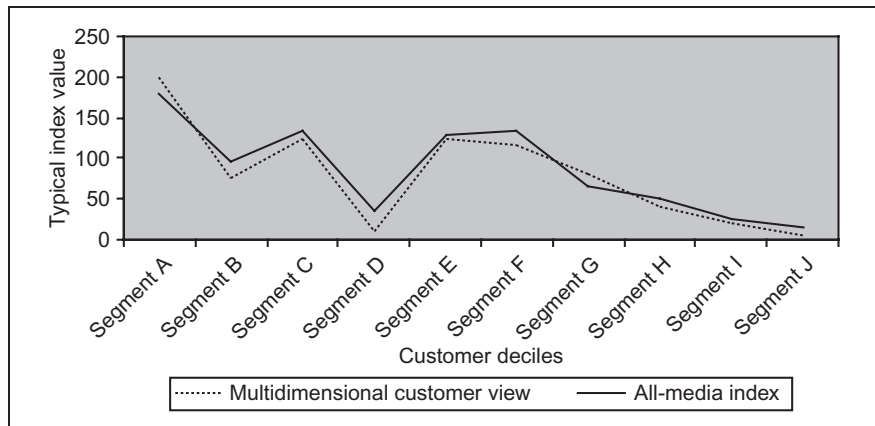
Figure 8: Integrated media fit to customer profile

rapidly. For many organisations it could solve a pressing problem – how to work across multiple channels using a common, standardised dataset without having to build a new data warehouse.

Typical of the problems in the past was the situation which arose at a large American car manufacturer. It had invested millions of dollars to build its customer database and in-house data-driven marketing skills. Each marketing function would pull down data from the core data warehouse and establish a local data mart to run direct marketing campaigns. When copies of each of the 12 data marts were compared as part of a data audit, not one set of data resembled another. The company had not lost the core DNA of its customers, but it had altered their features through the different demands, additions and enhancements of each marketing unit.

Translated into a media plan, those variations could have led to discrete campaigns being produced that failed to integrate with each other either horizontally, by having multiple mailings from different product groups to the same customer, or vertically, by failing to recognise that an individual treated as a prospect by one medium was already a customer.

CDI using knowledge-based matching should enable cross-media planning and integrated marketing that matches more closely the multi-franchise customer profile found in many organisations. The outcome should be an optimal media plan which ensures that coverage matches customer profile as closely as possible with very low levels of wastage. Media choices may be different for each segment, rather than assuming a single medium is appropriate to all. Figure 8 shows an ideal outcome of this type of integrated marketing planning with virtually no wastage. If clients can manage their data to enable this type of detailed approach, they may find their media schedules wash whiter than white.

References

1. Chartered Institute of Marketing.
2. *Financial Times*, 17 June 2002.