Advanced Analytics

The seven principal tools and techniques of Marketing Effectiveness.

Ebiquity Guide

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Introduction

The brands and companies that secure the best return on marketing investment (ROMI) are those that adopt a marketing effectiveness culture from the top down, led by the CMO but with the full and active endorsement of the CEO and CFO. Putting this kind of culture at the heart of the business requires marketers to develop a best-practice measurement framework. This means choosing the right partners, the right team, the data.

Most importantly, a best-practice measurement framework also demands that marketers select the right measurement tools and techniques for their specific requirements. These tools need to balance both long-term and short-term marketing imperatives, bringing together disparate data sources into one place to give a coherent and consistent world view.

This paper gives a detailed description of seven of the most important tools and techniques required to build a marketing effectiveness culture. For more information on how best to create such a culture, see the White Paper we published in partnership with ISBA in February 2019 – ***Cutting through the clutter, making sense of the hype: Demystifying the role of attribution in the context of overall marketing effectiveness.***[1]

[1] isba.org.uk/news/cutting-through-the-clutter-making-sense-of-the-hype/

1.
Econometrics & market mix modelling

The first technique we've highlighted is perhaps the most well established and one of the most important of all: econometrics. Econometrics is an approach that uses aggregated data over time to quantify the role of key drivers on selected key performance indicators (KPIs), such as sales, web visits, and footfall. It can evaluate the role of a number of different drivers simultaneously and measure changes over longer time periods, typically two to four years. The level of granularity that econometrics delivers is largely dependent on the data available. If the data is good enough, it is possible to develop models at a store / stock keeping unit (SKU) level. However, it is also a valid approach to measure the impact at a higher level, such as total sales for a given brand.

Econometrics helps to explain the role of a number of key drivers simultaneously and can make recommendations not just on advertising, but also price changes, promotions, and distribution levels. It can forecast the impact of changes in economic factors and help explain the role of weather in impacting specific KPIs. It evaluates the role of marketing – offline and online – not only in driving immediate conversion, but also longer term; typically up to 6-12 months after activity.

By understanding and explaining the past, econometrics can quantify the importance of drivers delivering key outputs, such as media ROIs. These insights are then used to generate future-facing recommendations and ensure budget levels are set to achieve given targets, accounting for all the other factors. Econometrics is well-established partly because of its flexibility and suitability across a range of different industries and KPIs. The breadth of questions that it can answer also helps to explain its popularity. It is true that there are differences between approaches, however the techniques are generally very similar across different suppliers. It is more the speed of the process, the manner in which it is applied, and how the results are interpreted that differentiate suppliers.

Econometrics not only measures the short term, but it can also measure longer term impacts of marketing. These vary, depending on a number of factors such as campaign message, purchase cycle, and market competitiveness.

While econometrics is a very powerful solution that provides a broad overview of performance, it does also have a number of challenges. These include:

- The need for historical data over a long period of time. Sometimes, advertisers have not stored the data in suitable formats to answer all the questions they may have. Also, products and brands may not have existed for long enough for econometrics to be the right solution.
- The requirement for variations in data to measure impact. Often, advertisers run campaigns with the same channel mix or always run channels in parallel, so econometrics can struggle to tease apart these impacts, and can only measure at an aggregate level.
- Low spend on small levels of targeted activity can often be difficult to measure using econometrics. Econometrics relies of larger movements in data, and so small impacts may not be picked up using this approach.
- Econometrics can take longer to run than marketers have to make decisions about future spend.

> Econometrics provides a good overview of what has happened historically. It is useful in measuring the efficiency of media channels across online and offline channels. Using all the insights generated, it is possible to make future-facing recommendations on price changes, as well as budget allocation and media phasing.

2.
Digital attribution

Digital attribution is an approach that measures the role of digital touchpoints (e.g. search, display, video on demand, or VOD) in driving a digital call-to-action (e.g. sales, customers acquisitions, quotes). It uses cookies to track consumers' digital behaviour, building information on the interactions (clicks / impressions) with a brand's digital marketing prior to conversion.

Digital attribution has been increasing in popularity, driven by the desire for more detailed information, delivered more often. Over time, the techniques have become ever-more complex as they try to accurately attribute credit for conversions across different digital touchpoints.

Rules-based solutions are relatively simple to understand. They rely on looking at the converted journeys and, depending on the rule applied, attribute the credit for the conversion to the appropriate digital touchpoint. Then analysts sum up all the values to estimate the role of each digital touchpoint.

Data-driven / algorithmic solutions are more complex. They look at all journeys (converting and non-converting) to establish the impact of each digital touchpoint. This approach might use Bayesian Networks, Shapley Value, Logistic Regression, and even Machine Learning solutions. These techniques are more tailored to business challenges. The bespoke data, however, are more involved and complex. This can make them harder to understand and implement.

Whatever the method used, the output from digital attribution is designed to enable advertisers and agencies to quantify the impact of digital marketing. This allows them to highlight areas that are not driving conversions and so make budget recommendations to improve efficiency.

Digital attribution has a number of strengths compared with other tools in the marketing effectiveness toolkit. These include:

› Digital attribution focuses on the conversion. This means that the recommendations are directly linked to performance KPIs that have an immediate impact to the bottom line. With the increasing shift to short-term planning, this provides a very attractive solution.

› Because of the granular nature and high volume of data, digital attribution can deliver detailed insights that other approaches cannot. For instance, it can make recommendations on display placements or formats and key word groups at a far more actionable level than econometrics.

› As large volumes of data can be collected automatically and even over short periods of time, it is possible to update models more often. This means it is possible to see results in near real time and ensure agile decision-making.

› With advances in technology, it is also increasingly possible to plug attribution results straight into ad-buying platforms. With machine learning approaches, this means advertisers can constantly evaluate, test, learn, and implement more efficient digital planning solutions.

While the theory behind digital attribution is very appealing, there are a number of challenges that cannot be ignored. These include:

- By its very nature, digital attribution is only focussed on digital transactions and interactions. While there are solutions that integrate market mix modelling with digital attribution to provide a more holistic view, 'pure play' digital attribution only considers digital. This means there any external factors – such as TV advertising – that are not accounted for.
- Digital attribution doesn't quantify the role of different underlying factors, such as weather or economic factors, when delivering results. It also fails to measure offline conversions, and so it cannot provide a complete picture of what marketing is doing for a business as a whole. This matters more for brands with significant offline presence, such as automotive, retail, and FMCG.
- Understanding the cross-device view is becoming increasingly complex. Probabilistic modelling and data stitching produce significant inaccuracies. So, accurately joining the millions of journeys on multiple devices is tricky.
- Couple this with the issue of cookie deletion – including Apple recently deleting cookies systematically – and it is increasingly difficult to understand the online consumer journey as much of it is either deleted or not properly integrated. This often leads to more focus on the touchpoints closer to the point of conversion and less emphasis on touchpoints earlier in the journey, such as display and VOD.
- Walled gardens – including the dominant social media platforms, Facebook and YouTube – are a real challenge for digital attribution. With data stored behind walls and so inaccessible, it is impossible to join up journeys and understand the role of all these digital touchpoints in single consumer journeys.

Overall, granular insight is critical in allowing for more detailed and frequent decision-making. However, digital attribution solutions should never be treated as 100% accurate. This is because of its broad array of data challenges and its inability to account for offline sales and drivers.[2]

[2] Note: for more detail on the challenges of digital attribution, see our joint paper with ISBA, Cutting through the clutter, making sense of the hype, as well as our Viewpoint paper Understanding Total View Attribution, hosted by WARC which can be downloaded from https://bit.ly/2Fn5QbL

3.
Brand equity modelling

To evaluate the role of marketing in driving brand KPIs, there are a number of different solutions available, including brand equity modelling. Brand equity modelling is an extension of standard econometrics, fused with pathway modelling. This technique can explain the link between key brand metrics / perceptions and how they drive business performance.

Using this approach, advertisers can evaluate how brand metrics impact different products as well as new and existing customers' volume and value sales. If brand data is collected at a customer segment level and the data is robust, analysts can understand the brand metrics by customer type. This provides even greater depth to the analysis.

This technique provides a comprehensive understanding of the most and least important brand health metrics. This allows advertisers to focus creative and media energy only on those brand metrics that matter in terms of actual business performance.

Brand equity modelling enables analysts to quantify the role of different campaign types and messaging and the impact they have in shifting brand metrics. This, in turn, allows us to understand how shifting some brand metrics directly through marketing will also shift other metrics indirectly.

The challenge with brand equity modelling is that, frequently, brand metrics are not reported often enough to understand the drivers of change over time. What's more, these metrics tend to move very slowly. Changing survey suppliers or survey methodology can also make it challenging to acquire robust and consistent data. However, although it can be challenging to collect, brand equity modelling can be incredibly helpful for creating the right creative and media strategies.

By combining brand equity modelling with econometrics, analysts can equate changes in brand KPIs with business impact, such as volume or value changes. The technique works in both the short term and – critically – the longer term, too.

4.
Media testing

Media testing is a great complimentary tool in the marketing effectiveness kit. If the test is set up correctly, it is a simple way to demonstrate the role of a selected media channel. This can support measurement approaches including econometrics and digital attribution.

The strength of this solution is its simplicity. A good test can clearly demonstrate the role of a given media channel in a simple way. Media testing can also measure small levels of spend, making it a less risky way to evaluate if a new channel will work or not in driving relevant KPIs.

The limitation of testing is that it can only test one variation at a time. Increasing the complexity of number of channels evaluated makes it harder to produce a clean, measurable test. And if the test can't be measured, then it is not worth doing. Done right, however, testing provides a clear and transparent way to help decision-makers understand the value of media.

5.
Paid, owned, earned media (POEM) analytics

Brands are engaging more directly with consumers, and consumers are sharing brand content more often. These trends mean brands need to evaluate the role and impact of earned and owned activity just as much as the more traditional paid activity. It is clear that paid, owned, and earned media are closely related, and brands that manage all three well are benefiting. Several approaches are used to measure POEM, from Structural Equation modelling to a nested modelling approach.

The benefit of analytics in this area is that it allows advertisers to quantify the role and impact of factors that have no obvious, direct cost and are also – at least in part – outside of their direct control. This approach enables them to understand the value of sharing content with their consumers and of having them engage with this content.

The challenges with POEM analytics are that it requires even more information than econometrics, and often some of the activity is incredibly low level and targeted at niche groups of consumers. Also, sometimes there is not enough historic activity to measure, although this is now changing.

6.
Price and promotion analytics

Price and promotion analytics help advertisers create and capture more value from their promotional investments. This allows them an incredibly granular understanding of their promotional history. It enables them to use these learnings to create price and promotional plans that truly deliver against their commercial objectives.

Brands promote in-store to drive either scale – volume and value – or profitability. One of the main challenges of this approach is that it demands a detailed database of promotional history to examine the impact each promotion has on the brand, the business, and its retail partner. Some advertisers don't have all this data accurately tracked for a long period. Outside the UK, some markets are not set up for this type of analysis because of the nature of relationships between brands and retailers.

Models explain how responsive each stock keeping unit (SKU) is to promotional discount and display. These models quantify incrementality and cannibalisation, meaning that we can measure the true commercial performance that each promotion has on both the brand and the category. This allows brands to identify the optimal promotional strategy for each product, down to individual SKUs

7.
Optimisation, simulations, and forecasting

Optimisation is best delivered through software tools. It can answer questions such as: How do I spend my current media budget and deliver more? What is the minimum budget I need in order to achieve my target? There are many other scenarios that optimisation tools can help with, including running simulations and forecasts for the future. They represent a safe environment in which to test different strategies.

There are many ways of increasing media efficiency, including reallocating marketing budgets across markets, brands, and channels, as well as phasing of media spend. Even within channels there are ways to drive efficiencies, such as the channel mix within TV, dayparts, or the best ways to address different target audiences. Using analytics and data to guide these decisions ensures that advertisers continually improve how their budgets are spent and accounted for.

One of the challenges of optimisation is that it can be difficult to optimise content and accurately predict performance of a new campaign message, particularly if it is completely different from previous activity. Also, if the strategy or budgets change beyond an acceptable range, the accuracy of the forecast becomes less accurate.

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- 650+ employees in 14 global markets including London, Paris, Madrid, New York, Sydney, Shanghai and Singapore
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Our consultants and experts work with market-leading local and global brands across three key areas:

- Media
  Achieve higher media performance through best-in-class media management and transparency
- Analytics
  Build evidence-based marketing programmes rooted in data and analytics
- Tech
  Design the right technology ecosystem to drive higher value from digital investments