HOW BRAND KPIS PREDICT SALES

INTRODUCTION

In recent years, DVJ Insights has done a lot of research into what marketers consider to be the most important KPI to determine the success of marketing. What most companies have in common is that success is mainly measured by a brand's sales or market share. Still, it is difficult to direct marketing based on sales. It is often preferred to use various brand KPIs that have the most influence on sales in order to achieve growth.

The Ehrenberg Bass Institute indicates that the main path to growth, and to achieve as many sales as possible, is the focus on penetration. Others, such as Reichheld, claim that the Net Promoter Score of Advocacy is the primary driver of sales. And others, such as Les Binet, indicate that the path to growth begins with increasing awareness. And so on and so forth. Different researchers hold different opinions, everyone finding sufficient evidence to support their own reasoning.

Especially in times of uncertainty, such as the current corona crisis, the general view is that it is important to continue investing in marketing to build a strong brand. A brand must be salient in the mind of the consumer. Several questions that may arise among managers right now, but also during other periods, are for instance: How strong is my brand? What is the average brand recognition and consideration for my brand? What are the effects of my marketing activities on my brand KPIs and sales? How do my brand equity or brand KPIs influence sales or other behavioural KPIs?

These and many more questions aren't just applicable to managers. The academic world is also immersed with these issues.

WHAT DO WE KNOW FROM SCIENCE?

In science, there have traditionally been two major currents within the marketing effectiveness literature. On the one hand, you have the quantitative flow, which models the effects of marketing activities on sales. These researchers are engaged in market response models. On the other hand, you have the branding and advertising experts who determine the effects of marketing activities on brand KPIs (referred to in literature as mindset metrics), such as brand or advertising recognition and attitude. This is called brand tracking. There really was a dichotomy and in this context, people often referred to hard metrics (sales) versus soft metrics (what happens in the mind of the consumer?).

Unfortunately, these literature flows co-existed and different insights, data and models were not shared between the two movements. However, since the early 10s of this century there has been some change in this dichotomy in literature, and there are scientists who combine both trends (see Figure 1).
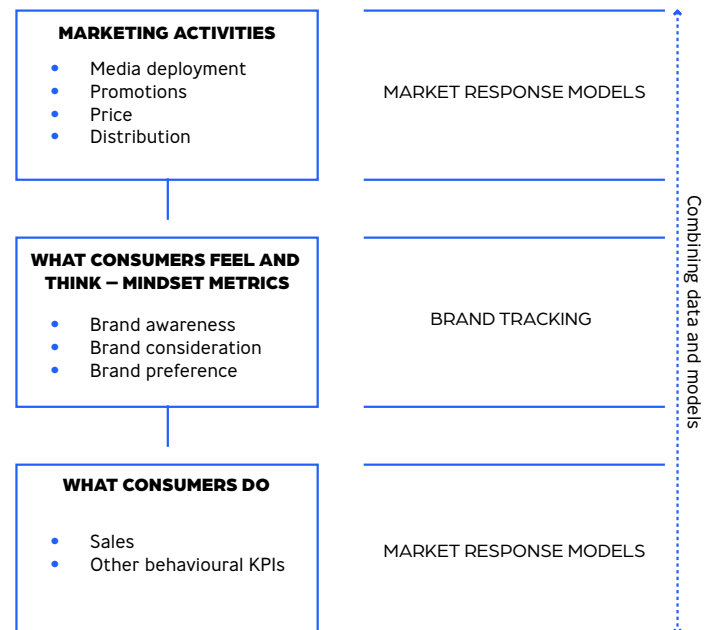

Figure 1: Overview of literature flows

Brand tracking research focuses on soft metrics and studies how consumers feel and what they think through questionnaires or experiments. This also includes, for example, pre-testing research. A major shortcoming of brand tracking research is that the effects on sales or other behavioural KPIs, are not included. These researchers are therefore often accused of not being able to make marketing 'accountable'.

Opposite to this are the 'modelers', who often work with scanner data in which sales are tracked and hard facts about media expenditure, promotions, etc. This enables them to model the 'hard' effects of marketing overtime, for different brands, categories etc. However, what is missing in these

market response models is the entire 'intermediate' process, namely what happens in the minds of consumers. In market response models, the intermediate steps, for example the fact that an advertisement first leads to advertising recognition and an increased brand recognition, are approached as a "black box". And this is a major shortcoming, because by also integrating brand KPIs or mindset metrics in market response models, it can be made clear why, or why exactly, sales increase or decrease, in addition to the use of the marketing activities. Next to that, some marketing activities will have direct effects on sales, but some effects will be indirect, as they will first impact brand KPIs or the consumer's mindset and only then, sales. Also consider the well-known AIDA model; it is ancient (almost 100 years!) and has also received a lot of criticism, but there are still many researchers who work with these underlying ideas. Whether there really is a hierarchy in the effects, whether there really is a brand funnel, or whether it is an iterative process, as McKinsey claims, the same brand KPIs are involved.

Something that is not always included in both research flows are competitors. Naturally, it is often more difficult to collect information about your competitor than about your own brand. Whilst insight into what the competition is doing in terms of marketing, is also very valuable. In addition, it is also very important to know how consumers think about your competitors. So, combining multiple data sources and data actually provides managers with more valuable insights than the isolated studies and data sources would.

Academic studies show that including different brand KPIs in market response models provides greater predictive strength in models to explain sales (e.g. Srinivasan et al., 2010; Bruce et al., 2012). This has already been demonstrated for different products in different categories. Brand KPIs also appear to play a major role in the online buying process (Pauwels & van Ewijk, 2020). In other words, data on brand KPIs and data on marketing activities can explain sales better than just marketing activities alone. Including sales, or other behavioural KPIs in the models is important, because this is how effects of marketing are made 'accountable'. In addition to the higher explanatory strength of models that combine different data sources, it also provides managers with more insights on which buttons to push to increase sales.

REASON FOR A META–ANALYSIS
These insights from science require a meta-analysis in practice. At DVJ Insights, are we also noticing that the strength of the brand is important – in addition to marketing activities – to increase sales? And which brand KPIs play the biggest role? Are brand KPIs more important than marketing activities for explaining sales? It is important to determine the most important KPI per brand and then to understand how this KPI can be managed.

At DVJ Insights we have several brand trackers where we track various brand KPIs on a weekly basis. Brand KPIs which are always included in our trackers are spontaneous brand recognition, aided advertising recognition, brand consideration and brand preference. We not only track our client's brand, but also the main competitors, so that the competitive position can be defined.

We realise that it is important to combine as many data sources as possible to get the most information from the available data. That is why we always ask our tracking clients to provide as much extra data as possible. Clients often provide sales figures or other behavioural KPIs which are important for their brand.

In addition, we have information about how much and in which media is invested. We have developed our own KPI, the RPS, for media use. The RPS takes all media input into account, corrects for the strength of the medium, and includes a decay factor for recall effects. The RPS has thus become a new measure that can express the number of contacts that a brand has with its target group, into one number on a weekly basis.

Because we have so much different data at our disposal for different brands in different sectors, we performed a meta-analysis to identify the importance of brand KPIs. We tested whether adding brand KPIs, of the own brand and of competitors, provides a better explanatory model than one in which only RPS is the explanatory factor for sales. With this, we demonstrate whether the strength of the brand influences sales (on top of marketing investments) and which KPI makes the difference.

THE APPROACH
We included 16 different brands in the meta-analysis. The brands are active in various sectors, such as FMCG, fast food, catering, pet food, and services. On average, about two years of data is available for all brands.
Some descriptive statistics regarding different brand KPIs are reported in Table 1. This shows that there is sufficient variation in the different brand KPIs.

	SPONTANEOUS BRAND AWARENESS	AIDED ADVERTISING AWARENESS	BRAND CONSIDERATION	BRAND PREFERENCE
AVERAGE	17.9%	9.0%	43.3%	5.9%
STANDARD DEVIATION	17.5%	7.6%	19.0%	6.5%
MINIMUM	0.0%	0.0%	7.0%	0.0%
MAXIMUM	68.0%	38.0%	89.0%	35.0%

Table 1: Descriptive statistics KPIs - * N=1468: Some brands have less than two years of data available and others more than two years.

We used a relatively simple approach to test the findings from science in practice. We estimated separate regression models for each brand, adding the different KPIs to the model step by step:

1. RPS
2. RPS + brand KPIs
3. RPS + brand KPIs + competitors' brand KPIs

This way, it becomes instantly clear what the additional explanatory strength of the brand KPIs is on top of the marketing activities. We can also determine which KPI is most important per brand; is that the marketing activities or is it just one or more brand KPIs?

THE RESULTS: BRAND KPIS IMPROVE THE EXPLANATORY STRENGTH OF SALES MODELS

The results of our meta-analysis show that adding brand KPIs to a model to explain sales, increases the model's predictive strength for most brands. The base model (model 1) is a model which has a constant as independent variable and the RPS to explain sales. Compared to this basic model, the explanatory strength of the model increases significantly for 11 of the 16 brands. Then, when we add the competitors' brand KPIs, the explanatory strength of the model increases for another 9 of the 16 brands. We use the R^2 and the adjusted R^2 as a measure of the explanatory strength (see Explanatory strength – the R^2). The average changes in explanatory strength for models 2 and 3 are reported in Table 2.

EXPLANATORY STRENGTH – THE R^2

The R^2 is a statistical measure of the percentage of the variation in the dependent variable that is explained by several independent variables. A feature of the R^2 is that it always increases when more independent variables are added, even if they are not actually related to the dependent variable. Therefore, the adjusted R^2 is often reported, which corrects the R^2 for the number of independent variables included in the model.

Table 2 shows the average increase in explanatory strength (R^2 and the adjusted R^2) compared to the base model, which only contains the RPS and a constant as explanatory factors. We see that adding brand KPIs (model 2) to this base model shows an increase in the R^2 of 13.7% across all brands and an increase of 18.2% for the brands with this increase in the R^2 being significant (that was for 11 out of 16 brands the case). The adjusted R^2 therefore strongly rises for these brands by 14.5%.

The addition of competitive KPIs (model 3) provides an additional 11.9% increase in the R^2 for all brands and an increase of 17.4% for those brands where this increase is significant (which was the case for 9 of the 16 brands). The adjusted R^2 increases in these cases by 15.4%.

MODEL 2. + BRAND KPIS	AVERAGE SIGNIFICANT & INSIGNIFICANT CHANGES (ALL 16 BRANDS)	AVERAGE SIGNIFICANT CHANGES (11 AND 9 BRANDS)
Δ R^2	+13.7%	+18.2%
Δ ADJ. R^2	+9.6%	+14.5%
MODEL 3. + BRAND KPIS COMPETITORS		
Δ R^2	+11.9%	+17.4%
Δ ADJ. R^2	+8.8%	+15.4%

Table 2: Average increase in explanatory strength* – * Compared to a model with only the RPS as the explanatory variable.

In short, these results confirm what has already been demonstrated in science. Brand KPIs are indeed important to explain sales, in addition to the importance of marketing activities. This applies to the majority of brands for their own brand KPIs, and for more than half of the brands, competing brand KPIs can also explain some of the sales.

THE RESULTS: WHICH (BRAND) KPI HAS THE BIGGEST IMPACT?

Now that the importance of brand KPIs has been determined, it is interesting to see which brand KPI explains the strongest sales. In this discussion, we focus on the interpretation of our own brand KPIs because they can be influenced, whilst influencing the competitor's brand KPIs is a lot more difficult.

In the different individual brand models to explain sales, we see for 9 brands that the RPS has the strongest effect on sales. This shows that media use plays an important role in explaining sales and that marketing investments have the desired effect.

Furthermore, we see that for several brands, the brand KPIs spontaneous brand awareness and brand consideration are the most important drivers. This shows that being salient in the mind of the consumer is indeed important (after Byron Sharp).

When we further compare the strength of the effects, we see that brand consideration has the strongest effect on sales, with an average effect size of .331, followed by spontaneous brand awareness (.266) and brand preference (.250). The use of media (RPS) has a similar effect (.263) on sales as the spontaneous brand awareness and brand preference.

KPI	# BRANDS	AVERAGE EFFECT
RPS	9 BRANDS	.263
SPONTANEOUS BRAND AWARENESS	4 BRANDS	.266
AIDED ADVERTISING AWARENESS	0 BRANDS	
BRAND CONSIDERATION	5 BRANDS	.331
BRAND PREFERENCE	2 BRANDS	.250

Table 3: Overview most important drivers*
* The number of brands mentioned in the table adds up to more than 16. In some cases, it turned out that for a brand 2 KPIs were almost equally important drivers for sales.

The results show that there is not one truth for all brands. The KPI that is most important for a brand and that a brand must focus on, can differ. For the time being, it seems that the consideration and awareness of a brand are important. Traditional brand KPIs that we all know and that are very easy to follow continuously.

All results can be summarised as follows:

- For most brands, there is a clear significant relationship (average standardised effect of .263) between the number of media contacts (RPS) and sales. It shows that when a brand invests more to reach and influence people, it generally works. It also means that less investment, as is currently the case due to the crisis, will lead to a drop in sales.
- When brand KPIs are also included in the model to explain sales, the explanatory strength increases. The role and position that a brand has in the minds of consumers has an additional reinforcing effect on sales.
- Finally, it appears that brand KPIs of competitors also have (often negative) effects on sales of the own brand. Although the competitor's brand KPIs are difficult to influence, it is important to understand these KPIs. For example, when the brand consideration of your biggest competitor increases, it can have an impact on the sales of your brand.

It is the combination of the different KPIs that help to understand the effects on sales. And, when it is clear which KPIs are important for your brand, it is also clearer which buttons can be pushed to increase sales. For example, when brand awareness is an important driver for sales, brand communication will be arranged differently than when brand consideration is an important driver.

CONCLUSION

This article shows that when sufficient data is available from different brand KPIs, media and behavioural KPIs, a lot of insights can be obtained with some relatively simple analyses. It is the combination of brand research and market response models that provide the most insights. For instance, marketing is accountable, and you also understand why. Brand KPIs provide important insights into the minds of consumers and can therefore be used to anticipate fluctuations in sales or other behavioural KPIs.

It differs per brand and industry which (brand) KPI(s) has / have the most impact on sales or other behavioural KPIs. The steps to be followed are therefore:

1. Start by measuring the main brand KPIs (the funnel) weekly.
2. Tracking your brand and competitors over time is very important. The relative position of the brand on the KPIs is even more important.
3. Collect other relevant data about your brand. This data is mainly in combination with sales figures and media data.
4. Estimate different models to understand the impact of your brand on behavioural KPIs, in addition to other marketing spend.
5. Start simple; even the simplest models provide more insight than using no model at all. The models can always be improved and optimised later.

Based on these steps, it is possible for any brand to understand the influence that KPIs have on a brand. Steering consideration or awareness requires a different media or creative strategy. Only when you know exactly what is relevant for your brand, can you really start the journey to growth. It indicates that scientific insight must be put into practice, but that staring blindly at one vision or model does not work in the most optimal way.

References