Is a 'niche' brand in the market also a 'niche' in consumers' mind?

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Abstract (120 words)

In this exploratory study we investigate whether a brand identified as 'niche' in traditional brand performance metrics (penetration and average purchase frequency) is also 'niche' in metrics representative of brand attribute associations. We assess the level of brand salience (propensity of eliciting brand attribute associations), the average association rate and salience penetration (proportion of people eliciting at least one association for a specific brand). We found that differential levels of loyalty, as reflected in deviations from the Double Jeopardy, are not apparent in salience metrics. This may be either because movements in brand attribute associations *precede* those in loyalty or because these two sets of performance metrics capture different constructs. Further research is underway to clarify these competing views.

Key words: Niche, Change-of-Pace, Salience, Differentiation, Brand Performance Metrics, Brand Salience Metrics, Loyalty.

Introduction

The term 'niche' in marketing literature and practice has been often used as a synonym for small brands with a high level of differentiation and loyalty; however, a more useful definition may be that of a brand which has higher level of loyalty and lower level of penetration than expected for its market share (Kahn et al., 1988). This definition allows a 'niche' status to be empirically assessed by comparing observed brand performance metrics against theoretical norms as derivable by the NBD-Dirichlet model of purchase incidence and brand choice. We extend this approach for a further assessment of the existence of true 'niching' behavior by testing whether the same brands can be identified as 'niche' both in standard brand performance metrics (such as penetration and purchase frequency) *and* in some key salience metrics (such as salience penetration and association rate, defined later in the paper).

Brand salience is the propensity of a brand to be thought of in buying situations (Romaniuk and Sharp, 2002, Romaniuk and Sharp, 2004). It is a crucial aspect of a brand's performance, since it underpins loyalty levels (Ehrenberg et al., 1997). It is highly correlated with market share and share of category requirements (the proportion of category purchases 'devoted' to a brand, a widely used loyalty measure for FMCG markets) (Ehrenberg et al., 1997); and it is extremely important in the consideration and evaluation steps that leads towards consumers' choice (Nedungadi, 1990). Therefore, any differential level of loyalty (as for the case of 'niche' brands) may be due to differential levels of brand salience. As suggested by Jarvis and Goodman, (2005), any 'niching' tendency should be anticipated by well-established and consistent brand associations (i.e. conceptual links between the brand and any information that might be related to it, which are the determinants of brand salience).

Recently developed criteria for salience measurement by Romaniuk (2010, working paper) provide the opportunity to test whether 'niching' tendency for a brand is also apparent in

salience metrics. Such analysis can: (a) extend the possible methods for measuring brand differentiation; (b) clarify whether 'niching' strategies are consistently reflected in both purchase-based and cognitively-based measures; and (c) provide a foundation for subsequently assessing brand salience as a possible predictor of brand success.

Background

Empirical identification of 'niche' brands

Assuming 'niche' brand definition as a relative concept (i.e. relative to the other brands competing in the market), standard brand performance metrics such as penetration and purchase frequency can help to identify empirically whether a brand is truly 'niche' (Jarvis and Goodman, 2005). Being positioned to serve a small base of highly loyal customers, a niche brand usually shows low market penetration (*b*), but relatively high purchase frequency (*w*) when compared with an average brand in the same category (Kahn et al., 1988). These characteristics represent a deviation from the Double Jeopardy law (McPhee, 1963) according to which competing and loyalty dynamics are mostly driven by a brand's size. The work of Ehrenberg, (1972) using panel data proved that brands with a higher market penetration are usually also purchased more often, as a statistical outcome of unpaired popularity and availability between bigger and smaller brands (Riebe, 2003).

The Dirichlet Model (Goodhardt et al., 1984) is a widely recognized stochastic theory of buying behavior enabling the prediction of future purchases on the basis of the patterns observed in past empirical data and captured by some statistical distributions. The model provides a set of theoretic brand performance metrics that can be benchmarked against actual market figures. Comparing the two sets of observed values and the corresponding theoretic estimates offered by the Dirichlet model, it is possible to identify major deviations from the Double Jeopardy constraint and therefore the existence of a 'niche' brand (Kahn et al., 1988).

Empirical measurement of Brand Salience

Many have discussed the importance of brand salience (E.g. Sutherland, 1993), but prior to Romaniuk's (2010) work, no clear conditions for measurement has been established. Going far beyond the concepts of 'top-of-mind' awareness or single-cue (category) based methods, Romaniuk (2010) describes clear empirical conditions for an accurate development of brand salience metrics. These metrics are based on the sheer number of people to whom the brand is salient (salience penetration) and the total number of brand associations held by those people (share of mind) relative to competing brands. They originate from the brand-attribute relationship captured in a *pick-any* survey scenario replicating consumers' mental structures about the brands (assuming an associative paradigm of memory, as per Anderson and Bower, 1973).

Brand salience depends, in fact, on the network of information stored in consumers' memory about the brand driving the retrieval process from long-term memory and, at the same time, also providing the screening criteria necessary to evaluate purchase options (Nedungadi, 1990, Chattopadhyay and Nedungadi, 1990). Therefore, the types of attributes included in the measurement should be likely to replicate criteria normally used to process buying decisions (such as 'something refreshing' for soft drinks) and should not overlap (i.e. capturing very similar constructs) (Romaniuk, 2010). Moreover, given the fact that prior experience (usage effect, see Bird et al., 1970) usually determines the propensity of eliciting brand attribute associations (higher rate of associations among brand users), any attribute deviating from this consistent pattern is not included in the measurement.

The salience metrics that we consider for this study are: (i) **salience penetration** (Sb) (%), defined as the proportion of 'non-zero associations' (the proportion of respondents eliciting at least one association for a specific brand), and (ii) **average rate of associations** (Sw), the average number of associations for a specific brand. Recent developments of Romaniuk's research (2010, working paper) has described how to obtain the theoretic equivalent of these metrics by applying the Dirichlet model, with the underpinning assumption of an occasion to elicit a brand attribute associations being similar to a purchase occasion. This application suggests the possibility to draw a similarity between salience metrics and brand performance metrics, implementing the same method used for identifying 'niche' brands in consumer behavior. The scope of the research is to investigate whether the magnitude and valence of the deviations are consistent in both sets of metrics, addressing the following research question:

RQ1: Does a brand identified as 'niche' in purchase patterns show a low salience penetration and a higher than expected rate of associations, given the number of people to whom the brand is salient (% of salience)?

Research method

We analyse three years of data for the toothpaste market in the US using: (i) AC Nielsen panel data for purchase metrics (penetration and purchase frequency); and (ii) consumers' survey data for salience metrics (salience penetration and association rate). We calculate the observed values for both sets of metrics for individual brands as well as for the overall category and insert these values in the Excel software for Dirichlet analysis by Kearns. This procedure enabled us to estimate the parameters for the Dirichlet Model distributions (i.e. the Negative Binomial Distribution and the Dirichlet Distribution) and to generate the corresponding theoretical metrics (i.e. expected penetration *b* and purchase frequency *w*, as well as expected salience penetration *Sb* and association rate *Sw*).

While fitting the model to the two sets of observed metrics, we controlled for the following aspects: (i) consistency in the number of brands analysed (approx.12 brands); (ii) having the same brands analysed (the ones for which both sets of observed metrics were available); (iii) using Romaniuk's (2010) empirical guidelines on the types and number of attributes to be included in the measurement of salience metrics. For reasons of space, we only discuss one year's results in the body of the paper, but further results are provided in the Appendix.

Drawing upon buying behavior literature, we have addressed RQ1 with the following analyses:

(a) Analysing the values of the theoretic benchmark $w\,(1-b) = constant$, adapted into $Sw\,(1-Sb) = constant$ for salience metrics, in order to detect abnormalities independently from the Dirichlet model (Kahn et al., 1988);

(b) Calculating Mean Absolute Deviations indexes (MADs indexes %), i.e. MADs as percentages of the average observed metrics for each set of theoretic metrics (see Driesener and Rungie, 2010, working paper); this allowed us to assess deviations of observed values from theoretic metrics in a more objective way, i.e. withdrawing the scale effect of metrics and enabling one to compare directly brand performance metrics as opposed to salience metrics, given the benchmark of tolerance for traditional Dirichlet estimates (approximately 19%).

Results

In Table 1 we report the observed (O) and theoretic (T) values across both sets of metrics (penetration and purchase frequency, as opposed to salience penetration and association rate). We also include the theoretical benchmarks and MADs values as percentages of the observed metrics (MADs index) to assess deviations from the Double Jeopardy pattern. The brands are ranked according to their market size (observed penetration).

Table 1 – Brand Performance metrics Versus Salience Metrics for Toothpaste (yearly results, longitudinal figures available in the Appendix)

	Penetration %		Av Purch. Freq				Sal Penetr %		Association Rate			
	O	T	O	T	w (1-b)	MADs index	O	T	O	T	Sw (1-Sb)	MADs index
A	25	26	1.9	1.8	1.4	6	67	69	5.4	5.2	1.8	5
B	14	13	1.5	1.6	1.3	8	61	61	4.3	4.3	1.7	0
C	9	9	1.7	1.6	1.6	6	45	45	3.4	3.3	1.9	1
D	7	6	1.3	1.5	1.2	14	56	59	4.4	4.2	2.0	7
E	7	7	1.5	1.6	1.4	3	50	50	3.5	3.5	1.7	1
F	6	7	**2.1**	**1.6**	**2.0**	**33**	31	30	**2.6**	**2.8**	**2.0**	**4**
G	5	8	**2.2**	**1.6**	**2.1**	**41**	35	36	**3.1**	**3.0**	**1.7**	**4**
H	3	3	1.4	1.5	1.4	4	56	56	3.9	3.9	1.7	0
I	2	2	**2.1**	**1.5**	**2.1**	**37**	n.a.	n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**
J	2	2	1.6	1.5	1.7	5	47	40	2.6	1.4	13	13
K	2	2	1.8	1.5	1.8	18	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
L	2	1	0.9	1.5	0.9	38	45	48	3.7	1.9	1.9	7

Considering brand performance metrics, brands F, G and I are identifiable as 'niche'; they have low penetrations and high average purchase frequencies compared to the theoretical norms for their level of market share. These deviations are also reflected in a high MAD index, indicating poor fit of the under-structured NBD-Dirichlet model to these particular brands. In contrast, turning to salience metrics, the two of these brands that are present (Brand F and G; Brand I shows the same tendency in the other two years analysed, see the Appendix) do not show any evidence of 'niching'. These brands are not showing higher than expected association rates (2.6 observed association rate versus a, expected 2.8 for Brand F; 3.1 versus 3.0 for Brand G). They also show a minimum MADs index (4% of the observed metrics, suggesting a good fit of the NDB-Dirichlet model for these brands) and a benchmark value in line with the Double Jeopardy threshold.

Finally, it can be observed that the ranking of the brands appears different when looking at the observed salience penetration figures.

These results suggest that the effect of usage (Double Jeopardy effect) operates differently on traditional performance metrics as opposed to salience metrics. Both the magnitude and the valence of deviations for 'niche' brands in salience metrics are different to the deviations observable in purchase metrics. This addresses our research question and suggests that *a brand identified as 'niche' in purchase patterns does not automatically show low salience penetration and a higher than expected rate of associations.*

Discussion

The fact that the two sets of metrics do not show the same patterns or deviations from the Double Jeopardy constraint is quite interesting. Both sets of metrics are traditionally used to assess the market performance of a brand and the level of equity of that brand. The fact they show differing performance, not just in share but also in 'niching', suggests that the two sets of metrics may capture some different aspects of buying behavior.

Being small brands, 'niche' brands usually have fewer users. These users, however, are meant to be highly loyal. Given Bird et al.'s (1970) description of how usage boosts the propensity to elicit brand attribute associations we would expect a 'niche' brand to show a smaller that expected share of brand attribute associations. At the same time, however, the higher level of loyalty and the stronger customers' experience with the brand should result in a higher share of associations. The smaller number of associations (as a whole) obtained due to a smaller customer base might, therefore, be nullified by highly loyal customers, (few customers that know a lot about the brand). This could possibly explain why 'niche' brands in traditional brand performance metrics do not deviate in salience metrics.

However, given the fact that salience is meant to underpin loyalty levels (Ehrenberg et al., 1997), it may be that one metric anticipates changes in the other. Jarvis and Goodman, (2005) suggested that in order to observe 'niche-like' loyalty levels, a brand must have capitalised a set of well-established associations. If this is the case, any actual 'niche' brand should be observed as such in salience metrics first (higher than expected association rate), and only then the levels of loyalty (purchase frequency and repeat rate) may start to move (higher than expected purchase frequency). In our analysis, for example, brands F, G and I could have been presumably 'niche' brands in salience data prior to the analysed periods.

Limitations and future research

This study is a preliminary assessment of similarities and differences between two sets of brand performance metrics (penetration and average purchase frequency as opposed to salience metrics). Comparing these two sets of metrics can help investigating the theoretical link between the two stochastic processes shaping: (a) purchase probabilities and (b) memory cognitive processes affecting consumers' choices. Uncovering if the same empirical patterns (same market scenarios, same irregularities, same competing dynamics among brands, etc.) are apparent and the potential differences between these two sets of metrics can clarify which set of metrics is more effective in anticipating a brand's market performance. Therefore, it will also help marketers understanding what is more important to monitor in order to assess the success of a brand and the effectiveness of marketing strategies, with a better allocation of market research budget.

The main limitation of this preliminary assessment in this direction, however, is that the two sets of metrics were originated from different data sources. Having data collected form the same source in the future (i.e. observing both purchase behavior of a specific sample and brand associations held by the same sample) will more accurately uncover the actual differences (or similarities) between purchase and salience metrics that at this stage are only speculative.

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