

Methodological note

Overview of the Retail study

2015 brings the seventh successful year in partnership with TNS South Africa for the Sunday Times Retail Awards. This year the Retail Awards was once again a standalone Retail study due to extended questionnaire length to accommodate more in depth attribute analysis in all the retail categories.


All categories were asked of respondents in both metro and non-metro areas to obtain a national read of all categories and retailers.

The approach looks at a retailer's penetration in the marketplace whilst also examining its relative strength amongst its users and its relative attraction amongst non-users – the concept of *relative advantage*. This was accomplished by asking three questions:

1. Retailer used within a defined time period (this period differed for each category)
2. Retailers with which people were familiar enough to rate on a 10-point scale
3. The actual rating of all those retailers on a 10-point scale

From this, an index score for each retailer is generated from three variables derived from the questions above: the actual usage of a retailer in a specified time period, the rating it receives from its users relative to others in the category, and the rating it receives from those non-users aware of it, also relative to competitors in the category. The non-user rating carries only half the weight of the user rating in the final algorithm.

The final index can be thought of as the retailer's standing in both the market place and in people's heads. This is in line with the current thinking that brand equity is a function of both Power in the Mind and Power in the Market, coupled with the view that one must always take the attraction of competitors into account in any assessment of brand equity.



How a retailer can win

A winner occurs in one of three situations:

1. If it is big AND rated above average by both its users and its non-users.
2. If it is truly big but perhaps only rated as average by its users and non-users.
3. It is smaller but very well loved by its users and is strongly aspired to by its non-users.

Why is this approach more useful?


Most retailers have a good sense of their relative size – publicising this is good for the ego but not much else. The approach adopted by TNS allows more useful marketing insights to be gained: a brand can assess by how much more – or less – its users rate it compared with average – a heads-up for some, as well as an indication of the relative commitment people have to a brand. Similarly, by looking at the non-user ratings, some idea of a brand’s relative “pull” amongst its non-users is gained – this is a good indication of its relative ability to attract new users. Comparing usership and these two ratings’ data tells marketers much about their relative power in the mind vs their power in the market.

The algorithm is not proprietary to either The Times, Sowetan or to TNS, but is in the public domain.

The sample represents all South African adults

The total sample is 2744, 2000 interviews in the metropolitan areas and 744 interviews in non-metropolitan areas of South Africa.

We talked to adults aged 18 years and the final results have been weighted to represent the population according to StatsSA 2014 mid-year population estimates. The study is representative of all adults across the country and is a relatively large sample in consumer research terms. Interviews were conducted in home, face to face.



What category changes happened in the Retail survey?

This year saw the addition of the bed stores category as well as additional brands being added to the following categories:

| CATEGORY | BRANDS ADDED |
|---|--|
| Liquor and Bottle Stores | <ul style="list-style-type: none"> - Diamond Discount Liquor - Market Liquor |
| Women's and Men's Clothing Stores | <ul style="list-style-type: none"> - Cotton On - Old Khaki - Poetry - YDE - Factorie |
| Shoe Stores | <ul style="list-style-type: none"> - Poetry - Kingsmead |
| Kids and Baby Stores | <ul style="list-style-type: none"> - Cotton On - Poetry - Earth Child - Naartjie Kids |
| Specialist Health, Beauty and Fragrance Outlets | <ul style="list-style-type: none"> - Poetry |
| Specialist Electronic and Entertainment Stores | <ul style="list-style-type: none"> - Bargain Books - Books Galore - BT Games - Game - Makro |
| Home Accessories and Décor Stores | <ul style="list-style-type: none"> - Poetry - Typo |
| Specialist Hardware and Building Stores | <ul style="list-style-type: none"> - Boxer Build - BUCO - Builders Superstore - Chamberlain - D.I.Y. Depot - Essential Hardware - Hardware Warehouse - Jack's Paint & Hardware - P & L Hardware |
| Tyre and Auto Fitment Centres | <ul style="list-style-type: none"> - Fit & Go - Tyre Mart - Tyres and More - Fastfit |
| Online Stores | <ul style="list-style-type: none"> - Netflix.com - Vidi.com - Redsquare.co.za - Superbalist.com - hi-online.co.za - home.co.za |

Additional brands were added to attribution questions throughout the survey to allow for more detailed analysis across more brands in 2015.

The algorithm in more detail

The algorithm is explained below via a worked example, along with the actual mathematical formulae.

The table below has five columns: usership, ratings amongst users and non-users and the extent to which these ratings differ from average. So, Retailer B has a usership of 13%. These users rate it 8.80 out of ten, which is 0.28 higher than the average for all user ratings. Non-users rate it 5.59, which is below the average for non-user ratings by 0.10.

| Retailer | Usership in last x weeks | Rating amongst users | Ratings amongst aware non- users | User rating - average | Non-user rating - average |
|---------------------|--------------------------------|----------------------------|---|-----------------------------|---------------------------------|
| B | 13% | 8.80 | 5.59 | 0.28 | -0.10 |
| A | 9% | 8.68 | 6.03 | 0.16 | 0.34 |
| C | 11% | 8.63 | 5.67 | 0.11 | -0.02 |
| H | 11% | 8.50 | 5.87 | -0.02 | 0.18 |
| ... | | | | | |
| L | 7% | 8.26 | 5.49 | -0.26 | -0.20 |
| Weighted average | | 8.52 | 5.69 | | |

The algorithm first calculates Power in the Mind by taking a third of the sum of 0.28 plus a half of -0.10. It then adds usership to this to get a score. The third and the half are scaling factors to give Power in the Mind approximately the same weight as usership (this varies slightly by category depending on the actual results). This score is multiplied by 40 and 50 is added so that the scores fall between 0 and 100.

Writing this out mathematically, we first define terms:

Let:

u_i = usage of retailer i

e_i = rating amongst users of retailer i , the retailer *experience*

a_i = rating amongst aware non-users, the retailer's *attraction*

\bar{e} = weighted average of all user ratings

\bar{a} = weighted average of all non-user ratings (amongst those aware)

k_i = awareness amongst non-users of retailer i , *knowledge*

Then:

$$\bar{e} = \sum u_i e_i / \sum u_i$$

$$\bar{a} = \sum k_i a_i / \sum a_i$$

The relative retailer experience for retailer i , r_{ei} , is given by:

$$r_{ei} = e_i - \bar{e} = e_i - \sum u_i e_i / \sum u_i$$

The relative retailer attraction for retailer i , r_{ai} , is given by:

$$r_{ai} = a_i - \bar{a} = a_i - \sum k_i a_i / \sum a_i$$

Power in the Mind for retailer i , m_i , is given by:

$$m_i = 1/3 [r_{ei} + 1/2 r_{ai}]$$

The Retail Awards/Retailers Index, t_i , for retailer i is then:

$$t_i = 40\{u_i + m_i\} + 50$$

$$= 40\{u_i + 1/3[r_{ei} + 1/2 r_{ai}]\} + 50$$

$$= 40\{u_i + 1/3[e_i - \sum u_i e_i / \sum u_i + 1/2(a_i - \sum k_i a_i / \sum a_i)]\} + 50$$