



# Building a unique brand identity: measuring the relative ownership potential of brand identity element types

Ella Ward<sup>1</sup> · Song Yang<sup>1</sup> · Jenni Romaniuk<sup>1</sup> · Virginia Beal<sup>1</sup>

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## Abstract

A strong brand identity must comprise unique identity elements such as logos, colours or characters that distinguish it from competitors and facilitate recognition and purchase. A critical marketing function is therefore deciding which elements to invest in, to protect and build this identity. Within this paper, a new measure, *Competitive Intensity*, is proposed as a means to critically evaluate brand identity elements on their uniqueness potential. Results of testing 1281 in-market elements from 13 consumer packaged goods categories in 19 countries show that character, logo and logotypes have the greatest potential for unique brand ownership. Colour, however, is more challenging to develop as a unique brand identifier due to high levels of competitive sharing. Competitive intensity varies for elements of the same type, suggesting that practitioner execution plays a critical role in successful ownership. Being the first empirical comparison of eight element types, this paper provides comprehensive guidance to practitioner decision-making.

**Keywords** Brand identity · Uniqueness · Herfindahl–Hirschman Index

## Introduction

During Christmas of 2011, Coca-Cola partnered with the World Wildlife Fund to develop the “Artic Home” advertising campaign in the USA and Canada, raising funds and awareness for arctic habitat protection. Intended to be disruptive, the campaign was fronted by the release of an Arctic Home can that diverted from Coca-Cola’s signature red for the first time. Featuring silver polar bears, the white can was intended to run until March 2012; however, when the cans hit shelves in November, they were met by immediate confusion and criticism by consumers. Hundreds of consumers published tweets, posts and comments publicly complaining that the can was too similar to the Diet Coke can (Shayon 2011). In response, Coca-Cola discontinued the white cans more than two months ahead of schedule, and replaced them with a red rendition of the Arctic Home can (Esterl 2011).

By removing the colour red, Coca-Cola made it difficult for consumers to recognise the product amid the clutter of

competing information. Critically, consumers use brand identity cues as short cuts to quickly recognise brands and distinguish them from competitors in their purchase environment and in the advertising campaigns they produce (Perry and Wisnom 2003; Hoek and Gendall 2010; Romaniuk and Nenycz-Thiel 2014). The colour red had been used to represent Coke consistently for 125 years (Booker 2012); for many consumers the white and silver can both be diverted from the mental image they had of Coke, and conformed to the colour palette and identity of Diet Coke. This is potentially damaging on several accounts. First, it fails to convey key Coca-Cola image attributes as characterised in the minds of consumers, and second, it affects the ability of that image to build brand equity for Diet Coke (Keller 1993, 2001).

The white can was designed to be “bold [and] attention grabbing”, said Scott Williamson spokesperson for Coca-Cola (Esterl 2011), but instead the disruptive campaign simply confused shoppers as core brand elements of Coke were altered to such a degree that it inhibited consumer ability to find and purchase the brand.

Identity elements are the cornerstone to brand identity that helps consumers to recognise brands and distinguish them from competitors (Hoek and Gendall 2010). These elements evoke the brand in the mind of consumers, and create a unique look and/or feel that makes it easy to identify

✉ Ella Ward  
Ella.ward@marketingscience.info

<sup>1</sup> School of Marketing, Ehrenberg-Bass Institute for Marketing Science, University of South Australia, UniSA City West, 70 North Terrace, Adelaide, Australia



the brand (Perry and Wisnom 2003; Romaniuk and Nenycz-Thiel 2014).

Brand identity elements are building blocks that contribute, creatively, to enhancing brand presence in advertising content and purchase environments. For example, many McDonald's advertisements contain no direct brand name, but instead favour brand identity elements such as the "Golden Arches" and "I'm lovin' it" jingle. Similarly, other brands, such as Tide, use strong colour blocking to direct consumers to their brand in-store. When utilised effectively, these identity elements can ultimately improve brand equity by enhancing brand learning, recognition and recall (Childers and Houston 1984; Perry and Wisnom 2003; Hartnett et al. 2016; Romaniuk and Sharp 2016).

However, building identity elements can be costly, and initial development often involves brand managers and designers engaging in a lengthy creation period. There are many different types of identity elements for brands to choose from, such as logos, logotype (the specific typography of the brand name), colours, characters, fonts, taglines, jingles and packs. This wide array of possibilities provides tremendous opportunity to maximise the value of branding; however, brand owners need to know which brand elements should be prioritised given time and budget constraints. Most studies into identity elements typically focus on only one or two element types (e.g. Kohli et al. 2007; Romaniuk and Nenycz-Thiel 2014). Whilst useful for appraisal of a single-element type, these studies do not help brand managers compare and select between the many different element types.

Past research into brand identity investigates the implicit meaning, fit and value of these elements on performance (Bellizzi and Hite 1992; Doyle and Bottomley 2004; Aslam 2006; Bottomley and Doyle 2006; Hynes 2009). However, as a precursor to providing performance value, these assets must be first ownable as branding devices so that this meaning may be attributed to the brand. The present research will help fill this gap by empirically examining the ability of brand identity elements to uniquely signal and identify the brand.

Uniqueness refers to the exclusivity of the elements link to the brand across the consumer base and whether it only evokes the brand (i.e. is mentally owned) or also evokes competitor brands (i.e. is shared across brands). Whilst awareness, or fame, of an element can be developed via investing in advertising to teach consumers, uniqueness needs to be assessed prior to execution as it is influenced by the actions of competitors, and therefore less controllable.

To measure the "ownability" of a brand element as brand identifier, or how unique it is to a single brand in consumer memory, this research borrowed the normalised Herfindahl-Hirschman index (HHI\*) from the economics literature as an assessment instrument. The Herfindahl-Hirschman

index (HHI\*), a widely applied scale to gauge the intensity of competition, has traditionally been used to assess the economic viability of company mergers (Herfindahl 1950). This research extends application of HHI\* to measure the level of competitive sharing of brand elements. This provides a novel measure of uniqueness for the *element*, rather than for individual *brands*, allowing a direct comparison of element types. Ultimately this allows the present research to objectively appraise the ownability of different brand identity element types and provide an empirical ranking of uniqueness potential to guide practitioners when selecting and developing a brand's identity.

Drawing on this new approach, the authors compare the competitive intensity of eight types of brand identity elements, with data gathered from real-world assessments across 13 consumer packaged goods categories in 19 countries. By including over 1200 elements, the current research is the largest and broadest published investigation into brand identity. The contribution of this work is to provide a direct comparison of the *Competitive Intensity* of eight brand element types, and to establish a framework for understanding how brands within a category compete for memory retrieval and associations.

## Brand identity

Brand identity is a combination of the name, terms, signs, symbols and design used to identify a brand's goods or services and distinguish them from competitors (Aaker 1991; Kotler 1991; Zaichkowsky 2010). Described as an integrated system of cues, the purpose of brand identity is to provide a physical, proprietary representation of the brand (Perry and Wisnom 2003). In this sense, rather than providing a reason to buy the brand, the primary function of brand identity is to create a synergy amongst disparate brand elements and establish a unique brand look and feel for relatively homogenous goods (Perry and Wisnom 2003; Underwood 2003; Romaniuk and Nenycz-Thiel 2014). The foundations of brand identity are the different types of non-brand name elements used to evoke a brand in consumer memory. Whilst not restrictive, these elements typically include logos, taglines, colours, jingles, characters, images and pack shapes (Zaichkowsky 2010).

From a neurological standpoint, brand identity elements add a rich layer of sensory information to the brand in consumer memory. Brand identity elements can help explain the brand (Kohli et al. 2013), add meaning (Dahlén and Rosen-gren 2005) and contain imagery such as colours and shapes that expand the way the brand is encoded and stored in memory (Keller et al. 2008; Hartnett et al. 2016). As a result, the brand becomes more readily accessible to the consumer via



improved memorability, recognition and recall (Childers and Houston 1984; Perry and Wisnom 2003).

The creative flexibility of brand identity elements also provides practical value, as they can be used to enhance integrated marketing communications and promote a cohesive brand identity (Nandan 2005; Luxton et al. 2015). By consistently using a palette of brand identity elements across multiple communication platforms, brands can create a higher degree of brand fluidity between advertising and the brand on-shelf, as well as executions across different media and over time (Romaniuk 2018b). This in turn ensures that the brand is speaking with one clear voice and sending a single message at all consumer touch points to emphasise a unique brand look and feel (Kapferer 2012).

As a flow on effect from a unified identity across platforms, strong identity elements can ease the cognitive effort consumers need to identify brands in media and retailing environments. Strong brand identity elements increase the amount of branding in marketing communications, speeding recognition and aiding correct brand attribution (Hartnett et al. 2016). They also help to attract attention, build brand visibility and break through large amounts of advertising clutter (Van den Bosch et al. 2005; Major 2014). Likewise, in noisy and time-pressured shopping environments, brand identity elements act as mental short cuts to reduce the cognitive effort required by consumers to find their brand on-shelf, thereby facilitating purchase (Olson 2004; Gaillard 2005; Hoek and Gendall 2010). Therefore, understanding how brand identity elements are stored and retrieved in consumer memory is vitally important for marketers wishing to facilitate and manage this process to improve brand memorability in all contexts.

### **The challenge of competitive links to brand identity elements**

A widely accepted set of theories of memory is the Associative Network Theories (e.g. Anderson and Bower 1979; Tulving et al. 1994). According to these theories information is stored as individual nodes in memory that become connected by associative links (Anderson and Bower 1979; Anderson 1983). Applying this theory, a brand is stored in memory as a node, to which many pieces of related information, including brand identity elements, are connected (Keller 1993, 2003).

These links play a vital role in the retrieval process of brand information, in line with the spreading activation theory (Collins and Loftus 1975; Anderson 1983). Describing retrieval as a cued process, spreading activation theory states that retrieval of information begins when a cue in the external environment activates a node in memory. This activation then spreads along the associative links to other related nodes until a particular node of information reaches

a pinnacle of activation and thus is retrieved from memory (Collins and Loftus 1975; Anderson 1983). In this sense, brand retrieval is a competitive process; just because a link exists between an element and a brand, does not guarantee that brand will be retrieved when the element acts as a cue.

To be successful brand identifiers, identity elements need to be uniquely associated with the brand in a consumer's memory (Keller 1993; Aaker 2001; Romaniuk and Gaillard 2007). When this is the case, the retrieval activation will spread to that single brand link, evoking only that brand. However, where a brand identity element is linked to multiple brands, competition for retrieval occurs, as each linked brand creates a potential pathway for retrieval. As the activation spreads across multiple links, it fans out and becomes diluted, reducing the probability and rate of retrieval for any one associated brand (Heil et al. 1994). The presence of competitive brand links therefore poses a continual risk for brands, as a competitor may be retrieved whenever the element is used as a cue. This makes understanding the presence and strength of competitor links to the brand's identity elements critical information when deciding which elements to prioritise for future use and/or development.

### **How competitive links form**

Competitive links may form in memory for a number of reasons. In the initial learning process, it is crucial to clearly pair the element with the brand so that consumers can learn to link the two in memory (Romaniuk and Nenycz-Thiel 2014). Advertising that uses identity elements that are not yet strongly associated with the brand without the direct presence of the brand name can form links with competitor brands. Consumers can misattribute the advertising, and therefore the identity element, to a competitor brand. This creates confusion and alternative pathways to brand retrieval, regardless of whether the identity element is actually used by competitor brands.

When any element of a product's packaging is reflected across the vast majority of brands within a category, that attribute is said to be prototypical of the category (e.g. the long rectangular unit carton of toothpaste) (Veryzer and Hutchinson 1998; Orth and Malkewitz 2008). Prototypicality is considered to have a mediating effect on whether consumers consider a product as a member of the category, and thus brand managers are encouraged to leverage these prototypical pack characteristics in order to enter the consumer's consideration set (Keller 1993). However, the desire to resemble other products within the category fundamentally conflicts with building a distinctive brand (Garber et al. 2000a). Similarly, certain design aspects, in particular colour, are often used to identify product variants such as flavour, portray consumer trending attributes (such as "environmentally friendly") or convey other concepts such as



country of origin (Labrecque et al. 2013). These non-brand name meanings can lead to overlap in assets used by multiple brands in a category and competitor links being formed.

Finally, competitive links may also form when competitor brands deliberately copy distinctive features of an original brand in a deliberate attempt to create a “look-a-like” product (Van Horen and Pieters 2012; Wilke and Zaichkowsky 1999). The intent behind this imitation is to leverage the brand equity of the larger brand (Shenkar 2010; Van Horen and Pieters 2012). Ultimately this erodes the strength of that element as a unique identifier for the original brand as it creates consumer confusion and homogeneity rather than distinction (Lomax et al. 1999).

## Research questions

Predominantly, research into brand identity elements is siloed, with studies focusing on a particular type, such as colour or logos, in great detail (e.g. Garretson and Niedrich 2004; Kohli et al. 2007; Romanuk and Nenycz-Thiel 2014). Yet, different types have fundamental differences that affect the way they are processed in memory.

The picture superiority effect is a memory phenomenon by which images are processed more fluently than words, making them more readily recognised and recalled from memory (Lutz and Lutz 1978; Childers and Houston 1984). Applying this theory, it could be suggested that taglines may be a more competitive element type, as they are entirely text and require only semantic, factual processing, making retrieval a more difficult cognitive task (Anderson and Bower 1972). Comparatively, element types that are image based, for example logos, may have greater potential for unique encoding and therefore be less competitive due to higher processing efficiencies for visual information (Paivio 1969; Anderson and Bower 1972; Lutz and Lutz 1978; Childers and Houston 1984; Perry and Wisnom 2003; Olson 2004).

Beyond the picture superiority effect, characters have increased depth of processing due to the presence of a face. It is generally accepted that detecting and identifying faces requires little cognitive effort, and that, the processing of these faces is fast and efficient (Ellis 1975; Bruce 1982; Samal and Iyengar 1992). They are also commonly created specifically for the brand, reducing confusion with competitors and minimising the potential for competitive links to form in memory.

By similar regard, it is proposed that the way elements are handled by industry practitioners is likely to influence their competitive intensity. For example, firms spend an enormous amount of time and money developing and promoting logos (Henderson and Cote 1998). This investment, coupled with the relative ease with which they can be registered as

a trademark, leads to logos commonly being thought of as a signature to accompany products (Snyder 1993). As a result, there appears to be a greater tendency for consistent use of logos compared to other element types. This consistency gives consumers greater opportunity to learn and reinforce brand logos; potentially decreasing the competitive intensity of this element type.

Industry practice may also indicate potential barriers to owning a colour element. As previously discussed, certain product design elements may lend themselves to category prototypes and therefore be more difficult for individual brands to own as a brand identifier. Notably, this appears most common for colour, which is widely used to identify both entire categories, and also specific variants within those categories (e.g. blue for glass cleaner, yellow for citrus scent) (Garber et al. 2000b; Zampini et al. 2008; Piqueras-Fiszman et al. 2012). It is proposed this use of colour to distinguish between formulations, rather than distinguish between brands, is likely to lead to overlap in memory associations for various colours and therefore higher competitive intensity.

Although memory theory and industry practice can be drawn upon to make inferences about different element types, to date, no study has compared the actual performance of elements as unique brand prompts. As a result, little empirical guidance exists for marketers wishing to select or evaluate different types of brand identity elements for this purpose. Therefore, this research seeks to address this gap, and asks the following research question:

RQ1: Do certain types of brand identity elements have significantly higher or lower Competitive Intensity?

RQ1 will provide evidence for which element types are typically the most unique. To understand the degree to which this uniqueness extends to the individual brand assets within these types, variation will be explored. This exploration will help to determine whether certain types are consistently more or less likely to foster successful brand ownership. Ownership in this context does not refer to proprietary ownership, but instead to whether the asset is uniquely linked to a single brand in consumer memory.

RQ1 will indicate whether certain asset types generate more competition on average. RQ2 will explore this competition in more depth, observing brand uniqueness scores for individual assets of a particular type. For example, it could be postulated that the treatment of logos as signatures decreases the mental competition for this asset type overall, and also generates low variation in the individual brand uniqueness scores because this treatment is consistent for the majority of brands. Comparatively, the many uses of colour may create excess competition for this asset type, with certain colours experiencing greater sharing than others. Should this be the case, we would anticipate high variation



in the degree of ownership for individual colours. To better understand the relationship between Mental Competition and brand ownership of Distinctive Assets, the following research question is proposed:

RQ2: To what degree does variation in Competitive Intensity within element types suggest that some types are more or less difficult for a brand to uniquely own in consumer memory?

## Research method

To answer the research questions, a broad range of brand elements required inclusion in the study. This research draws on metrics collected from 1281 in-market brand identity elements from a broad range of types; colour, logo, logotype, tagline, pack, pack image, character and product form. These metrics were collected from 13 consumer packaged goods categories; six consumable (food or drinks) and seven household goods (see “[Appendix A](#)” for more detail). Each primary data collection was part of a series of commercial assessments of the strength of different brand identity elements, which means the metrics are real-world assessments of identity element strength from category buyers in each country. This emphasis on category buyers ensures a customer-centric approach, which has been recognised as a necessary complement to existing brand identity research which is typically of theoretical design (Bresciani and Del Ponte [2017](#)). The focus is on packaged goods categories as these categories have similar sources of brand identity elements, marketing communications and in-store packaging. This avoids the research bias that might seep into asset types with the inclusion of services or durable categories.

## Data collection

The data were collected over a two-year period from 2013 to 2015 across 19 different countries (see “[Appendix A](#)” for detail). In total, 61 datasets were used. All data were collected using online consumer surveys with the sample drawn from online panel providers. The survey participants were screened for category usage (see “[Appendix A](#)” for category specific screeners) and then demographic variables; age, gender and geographic location used to ensure a nationally representative sample. Respondents were presented a series of de-branded elements for competitive brands in the category. In line with Romaniuk and Nenycz-Thiel ([2014](#)), the following instruction was given: “Please indicate which, if any, brands come to mind when you think about \*insert category description\*, or tick none if you don’t think of any”. The category cue was updated for each survey. Respondents

could enter up to three brands, or tick a “none” box, indicating no brands came to mind (see “[Appendix B](#)”). Respondents were provided with the category and element only, at no point where respondents provided a list of brands.

Each survey included a sample size ranging from 400 to 600 category buyers, and included a selection of elements that reflected various types and belonged to brands of varying size. In total, across 61 studies, 26,755 respondents were surveyed. These wide ranging packaged goods studies are drawn from the data available. The large number of studies avoids selection bias when only one or two categories or countries are present due to researchers only pre-selecting data collection opportunities that conform to the researchers’ expectations.

To compare across element types, the data from each study were merged into a single data set. To ensure adequate sample sizes for calculations, only elements that were recalled by at least 20% of the sample group were included for analysis.

## Classifying element types

The study includes eight element types (see Table 1), comprising colour, logo, logotype, tagline, pack, pack image, character and product form (Olson [2004](#); Gaillard [2007](#)). Colour, logo, tagline, pack and pack image types were tested across all categories. For category inclusion detail on logotype, character and product form, see “[Appendix C](#)”.

## Calculating element competitive intensity

Calculating competitive intensity involves two stages. The first is to calculate how unique the element is at a *brand* level, namely which brands are linked to the element and in what proportion. The second step is the calculation of the Herfindahl–Hirschman index (HHI), a measure to index how competitive the *element* is.

As a precursor to evaluate the competitive intensity of an element, the uniqueness of an element was calculated at the brand level to determine how many brands were associated with each element and to what degree. The *Uniqueness*<sup>1</sup> metric is calculated as the proportion of total brand responses that are devoted to a single brand for any given element (Romaniuk and Nenycz-Thiel [2014](#)):

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<sup>1</sup> Within this paper uniqueness is used in two separate contexts, as a general concept and also to describe a specific metric. Where referring to the metric, *Uniqueness* has been capitalised and italicised for clarity.



**Table 1** Element-type classifications

Elements type*	Definition
Colour $n=170$	A single block colour or colour combination represented by a single square swatch
Logo $n=180$	The entire logo, or a feature component of the logo where typeface would otherwise be present
Logotype $n=79$	The holistic typeface and style as taken from the logo and rearranged to disguise the brand name
Tagline $n=235$	A short catchphrase or defining statement
Pack $n=270$	The holistic pack as it would appear on-shelf, or a specific design feature such as the closure, excluding/masking the brand's name
Pack Image $n=164$	A particular image that features on packaging
Character $n=90$	An animated brand ambassador. To classify as a character the animation had to demonstrate personality or an active role in advertising
Product Form $n=93$	An image of the product

\* $n$ =total number of elements tested across markets/categories

### Uniqueness

$$= \frac{\text{No. of times a given brand is linked to the element}}{\text{No. of times any brand is linked to the element}} \times 100$$

Represented as a percentage for each brand, 100% *Uniqueness* indicates that the identity element is entirely unique to that brand, and 0% suggests that the brand received no brand mentions for the given element. For any one element, *Uniqueness* will always tally to 100%. The distribution of *Uniqueness* scores, however, is dependent upon the number of brands linked to the element and the number of mentions each of those brands received. It is important to note that uniqueness, in this context, is based on consumer perception, and does not reflect whether or not multiple brands actually employ similar or identical brand elements. To ensure robust results, only those brands that received a *Uniqueness* score of 5% or higher were included for the next stage of analysis. This was to reduce sampling errors based on brand responses given by very few respondents.

To achieve a measure of competitive intensity at the individual element level, the HHI is applied to index the distribution of *Uniqueness* scores between brands. Traditionally, a measure of market concentration, this approach has been applied more recently to branding (Henderson and Cote 1998; Henderson et al. 2003; Van der Lans et al. 2009). Typically, the HHI is calculated by summing the squared market share of all firms in the market, where  $S_i$  is the market share of brand  $i$  and  $N$  is the total number of firms in the market:

$$\text{HHI} = \sum_{i=1}^N S_i^2$$

Thus, the value of the HHI, stated in decimal terms, ranges from  $1/n$ , a perfect competition, to 1, a pure monopoly (Hirschman 1945, 1980). Within the current research, the

HHI is employed to index the concentration of *Uniqueness* for an identity element, or, the degree of sharing amongst associated brands in consumer memory. To calculate this competitive intensity, market share is replaced with *Uniqueness* such that:

$$\text{HHI} = \sum_{i=1}^N U_i^2$$

where  $U_i$  is the *Uniqueness* of brand  $i$  for a given element and  $N$  is the number of brands linked to that element. The HHI of an individual element is therefore equivalent to the sum of all *Uniqueness* squared for that element (e.g. to calculate HHI for a particular character in France, the *Uniqueness* scores of all brands associated with the character would be squared and then summed together to give an overall ratio of how competitive the character is).

To withhold the influence of number of brands retrieved for an element ( $N$ ), and make element scores directly comparable, the normalised Herfindahl–Hirschman index (HHI\*) was calculated as:

$$\text{HHI}^* = \frac{(H - 1/N)}{1 - 1/N}$$

where  $N$  is the total number of brands retrieved and  $H$  is the usual HHI.

Where the original index (HHI) is only comparable across elements with an equal number of associated brands, the normalised index (HHI\*) facilitates comparison of identity elements irrespective of the specific competitive makeup. The normalised index falls on a scale of 0–1, where 1 implies an element is 100% unique to a particular brand, and 0 denotes pure competition among competing brands. The individual indices were then averaged for each element type and are reported below.



**Table 2** Interpreting concentration levels of competitive intensity

HHI* range	Concentration level
0	Intense Competition: the element is shared amongst competing brands. No brand mentally “owns” the element
0–0.5	Low Uniqueness Concentration: there is a high degree of sharing, but uniqueness is not divided amongst competing brands equally
0.5–0.8	Medium Uniqueness Concentration: one brand has the majority share of uniqueness although other brands are still sharing the element
0.8–1	High Uniqueness Concentration: the element is primarily unique to one brand, but minor competitor links still exist
1	Total Ownership: the identity element is entirely unique to one brand. The brand owns that element in the mind of consumers and does not compete with other brands

**Table 3** Mean competitive intensity of brand identity element types

Element type	Number tested	Mean HHI*	Relative Stdev % of HHI*	Min	Max
Character	90	.69	50	.011	1.0
Logo	180	.61	58	.011	1.0
Logotype	79	.60	61	.002	1.0
Product form	93	.49	70	.002	1.0
Pack	270	.48	71	.0004	1.0
Image on pack	164	.41	79	.009	1.0
Taglines	235	.39	86	.0003	1.0
Colour	170	.31	86	.001	1.0
Weighted average/total	1281	.47	70		

## Results

To provide a context for the HHI\* ratings calculated within this study, Table 2 shows common levels of the traditional concentration ratio adapted to the present research.

### Comparison between element types

To answer RQ1, the mean competitive intensity (HHI\*) was calculated for each element type, with an ANOVA performed to detect significant differences in the competitive intensity of element types. The results (see Table 3) provide evidence of significant differences (overall significance of  $p < 0.001$ ). Between item statistical tests, reveal character (HHI\* = 0.69), logo (HHI\* = 0.61), and logotype (HHI\* = 0.60) are significantly higher in *Uniqueness* concentration than other element types (but not each other). This suggests that in line with the earlier discussion on memory theory and industry practice, these three element types have lower competitive intensity than all other types. Colour, however, has the lowest *Uniqueness* concentration, and therefore the highest competitive intensity (HHI\* = 0.31). It is significantly more competitive than character, logo and logotype, as well as product form (HHI\* = 0.49), and pack

(HHI\* = 0.48), but this difference is not significant from image on pack (HHI\* = 0.41), or taglines (HHI\* = 0.39).

### Comparison within element types

In response to RQ2, the Relative Standard Deviation (RSD)—otherwise known as the Coefficient of Variation—is calculated to measure competitive intensity dispersion within types. The advantage of using this measure is that it facilitates easy comparison of element types, because the variation is measured on the same relative scale and expressed as a percentage. As it is not proportional to the mean, more direct comparisons can be made.

Ranging from 50 to 86%, variability is high across all element types, with individual HHI\* scores varying by 70% of the mean value on average. Notably, variation trends in line with competitive intensity (see Table 3). Whilst on the surface this appears intuitive, it indicates that element types that have less mental competition, such as characters, are *consistently* less competitive. That is, the element type average better reflects all individual elements of that type. Comparatively, more competitive types, such as colour, have greater variation and the success of individual assets therefore appears more sporadic.



**Table 4** Percentage of cases that fall within the relevant intensity brackets

Element type	>0.5	0.5–0.8	0.8<
Character	30	23	47
Logo	39	23	37
Logotype	38	27	35
Product form	55	24	21
Pack	57	20	23
Image on pack	67	16	16
Taglines	67	17	16
Colour	82	11	7

Colour elements have the highest variation in individual uniqueness (86%). This suggests that although this type is the most competitive on average, there are still individual brands who are successfully owning a colour asset in consumer memory. In fact, as the HHI\* values of all element types vary between 1 and close to 0, the distribution of individual elements across the competitive intensity brackets reveals all asset types have successes ( $> 0.8$  HHI\*) and failures ( $< 0.05$  HHI\*) (Table 4). Addressing RQ2, this implies that the unique ownership of a brand element is not inherent to its type, but instead results from a combination of factors including things such as element design, quality of execution and initial pairing of the element with direct branding. It is therefore determined that rather than specific types having clear potential for unique ownership, there is potential for assets of all types to be uniquely linked in consumer memory.

## Discussion

A strong brand identity is paramount to effective branding; this is increasingly difficult to achieve in today's cluttered, fragmented, multiplatform environment. Brand identity elements are wide ranging and can include colours, logos, characters and taglines. To date, there has been no systematic research in the marketing literature on retrieval strength or ownability of a wide range of different types of brand identity elements. This research tackles this issue in a consumer packaged goods context, drawing on over 60 different studies in 19 countries, across 13 categories and including over 1200 individual measurements of brand identity element uniqueness. This makes it the most comprehensive study in this field of literature to date.

Applying the Herfindahl–Hirschman index (HHI\*) to measure the uniqueness of brand identity elements is a theoretical contribution of this paper. This research extends the limited use of the established economic measure in a branding context and, for the first time, contributes empirical evidence to further develop guidelines for brand management (Henderson and Cote 1998; Henderson et al. 2003; Van der Lans et al. 2009).

Based on the HHI\* values, character, logo and logotype have the highest average concentration of *Uniqueness*. Characters provide a humanistic visual representation of the brand (Garretson and Burton 2005; Orth 2014). Their human-like features tap into the innate perceptual bias of the human brain to see faces in what would otherwise be ambiguous visual information (Tsao and Livingstone 2008; Orth 2014). Faces are processed far more rapidly than other information as they play an integral role in navigating the social environment (De Haan et al. 2002; Wallis 2013). This gives Characters a greater potential to be uniquely owned by brands (anecdotal examples include the M&Ms characters, Froot Loops' Toucan Sam, and Colonel Sanders of KFC).

Logos have long been considered synonymous with the brand as the basis of competitive differentiation (Watkins 1986; Aaker 1991). Supporting this paradigm, the present research finds that logos are significantly less likely to share associations with competing brands than other element types. This further supports more recent research that suggests logos are a viable means to create unique brand associations (Major et al. 2014). Furthermore, the inclusion of logotype in the top uniqueness cluster provides evidence that the logotype, being inclusive of the typeface, colour and pictogram, can strengthen a brand's identity and increase perceptual fluency, and so should not be changed without careful consideration of the consequences (Doyle and Bottomley 2004; Zaichkowsky 2010).

At the other end of uniqueness performance, this research discovers that colour, on average, has the lowest *Uniqueness* concentration and the highest within-type variation, making it the most difficult type of element to own. With only 7% of colour elements falling into a high uniqueness range, the incidence of brand ownership is far lower for colour than any other type.

This suggests that colour is vulnerable to imitation as a brand identifier in a competitive category. This builds further knowledge of the difficulty for brands to own a single, unique colour (Hoek and Gendall 2010; Zaichkowsky 2010; Major et al. 2014). From a practical standpoint, all brands must elect a colour palette, even if that selection is black or



white. With the necessity of colour selection and the limited number of core colours for brands to choose from it is an exceptionally difficult, if not an impossible task to select a colour that is entirely unique (Hoek and Gendall 2010). Additionally, it has been found that when colour is used as a sole element, it tends to be less memorable and recognisable due to the lack of elaborativeness or representativeness (Henderson and Cote 1998). Further investigation into the role of element complexity and joint effects are recommended (as per Janiszewski and Meyvis 2001), as is research into whether the low levels of colour ownership could be overcome with better execution of colours as a brand identity element.

Additionally, trademarking laws can vary from country to country and change over time, making the protection of colour as a brand device an exceptionally expensive and time exhaustive process. A well-documented example is the case of Cadbury (vs.) Nestle in the United Kingdom. In the latter half of 2004, Cadbury began the difficult task of trademarking Pantone 2685C, the shade of purple the brand had, at the time, been using for 90 years. In a legal battle spanning longer than a decade, Cadbury was initially granted approval for Trademark registration in 2012. However, the victory was short lived when, in 2013, the Court of Appeal overturned the decision of the High Court, saying Cadbury's description of the colour and its use was too ambiguous. Cadbury's 2014, 2016 and 2018 appeals against the ruling have since been rejected, and Cadbury has reportedly indicated it does not intend to launch any further appeals (Azrights Solicitors 2013; Novagraaf 2019). The above case study provides a practical understanding to the difficulty of colour ownership as it demonstrates the notoriously difficult process of legally protecting colour as a brand asset.

Further to this, prior research proposes that colour should identify both the brand—by making it distinctive—and the category (Garber et al. 2000a). However, homogenous use of a colour to signal an entire category fundamentally conflicts with colour uniquely identifying a brand. Further, colour is frequently used as a communication device to portray a specific varietal feature, such as flavour (Koch and Koch 2003; Kauppinen-Räisänen and Luomala 2010). This documented use of colour to communicate product traits at a category level provides further support that colour is the most difficult asset type to own (Garber et al. 2000a; Labrecque et al. 2013).

By similar regard, taglines and pack images are significantly less unique than characters, logos and logotypes, each with 67% of cases falling in the low uniqueness—intense competition brackets ( $HHI^* > 0.5$ ). Within this, research taglines were tested as text. Not only is text less likely to gain attention when compared to graphic images (Edell and

Staelin 1983), but it is well-documented that words are also less likely to be recalled and recognised (Paivio 1971; Nelson et al. 1976; Childers et al. 1986). Whilst pack images overcome this initial disadvantage, they rely entirely on associations being formed and reinforced by direct experience with the product or pack-shots in advertising, which are often fleeting.

Memory recall is mediated by similarity in the context of the information at the time of learning and then attempted retrieval, such that the same context will enhance recall, whilst a different context inhibits retrieval from memory (Smith et al. 1978). Whereas characters, logos and logotypes are executed across a wide range of consumer touch points, pack images are the only element type to rely exclusively on the pack as a mode of consumer learning. The effects of this are twofold: fewer opportunities for consumers to learn and reinforce these associations, and fewer contexts for this learning to take place in.

In the case of this research, elements were tested as independent images. Whilst this would have a negatable effect on characters, logos and logotypes, it could be speculated that the lower uniqueness of images on pack may be attributed to consumer reliance on the holistic pack for contextual cueing information to guide memory retrieval (Bouton 1993).

## Managerial implications

The key industry insight of this research is that characters, logos and logotypes provide the best opportunity to develop unique associations, whilst colours are significantly more likely to be shared with competitors. To build a strong identity, brands should prioritise developing a character, logo or logotype for use in advertising and retail environments, and be cautious when relying solely on colour elements to uniquely signal the brand. To improve the potential for unique ownership, it is suggested that brand colours be incorporated into a consistent design feature, or multiple colours be used in combination, to create a more distinct look and feel (in line with Zaichkowsky 2010; Romaniuk 2018a). This will aid in reducing competitive links in memory by adding additional memory cues, such as shape, to improve consumer encoding (Anderson and Bower 1972; Paivio 1969).

Whilst some types come with a natural advantage, the results of RQ2 show that ownership is not guaranteed. Considering the high variation in *Uniqueness* concentration across all types, brand execution and design, as well as marketing strategy, are still crucial to build and retain uniqueness in a competitive market. Practitioners should



therefore ensure that brand elements are emphasised, alongside direct branding, in communications and all touch points to strengthen consumer memory associations and links with the brand.

Further research is suggested to investigate the effects of within-type characteristics that may influence ownability. For instance, research suggests logos with representative and natural elements tend to be more memorable than logos with more abstract design elements (Henderson and Cote 1998). It is also posed that element complexity and perceived meaning may affect processing fluency (Janiszewski and Meyvis 2001). Consistent execution in brand communication over time is vitally important to build a unique and distinctive brand identifier (Van den Bosch et al. 2005). Further research in the area is needed to create a stronger empirical base for industry guidance.

In summary, this research is the first attempt to empirically confirm that some brand building elements are more valuable than others as unique brand identifiers in a competitive environment. The HHI offers a practical measure to assess uniqueness potential of brand identity elements, which could guide brand managers in their selection.

## Limitations and future research

The high variation in competitive intensity evidenced across all element types indicates that average ownability does not affirm the ownership of individual assets. Exploration into potential causes of this within-type variation is a valuable opportunity for future research. For example, findings could be extended by examining anthropomorphism in branding, to see if there is a link between the extent of anthropomorphism and character uniqueness. Within this research it is argued that well-branded execution in advertising plays a vital role in successful ownership; future research could also examine the use of identity elements in advertising as a means of testing this.

Additionally, it is acknowledged that culture and market may influence the competitive intensity of brand elements. For example, emerging markets such as Asia are typically categorised by intense levels of competition (Luo et al. 2011). These markets tend to lack the legal infrastructure required to protect intellectual property such as brand identity, and consequently imitation products fall largely into a zone of acceptance not evident in developed markets (Wilke

and Zaichkowsky 1999; Deephouse and Suchman 2008). Exploring the competitive intensity of brand elements in a cross-cultural context is an important avenue for future research to improve the generalizability of findings (as per Henderson et al. 2003).

Furthermore, within this study, element types were considered independent from one another, but it is acknowledged that there is potential for interaction effects between types. Testing how different combinations of these elements, for example colour and shape, performs as unique identifiers would be a valuable means of extending the current research.

The current research is limited to only national brands competing in consumer packaged goods categories. It could be posed that brands within other categories, such as services, durables or luxury, would receive a greater number of unique associations to their brand identity elements (Romañuk and Gaillard 2007). To test this hypothesis and extend the scope of current research, future research should examine the uniqueness concentration of brand identity elements beyond packaged goods.

Lastly, this study could be replicated and extended to incorporate other element types, such as auditory elements like jingles, to improve generalisability and relevance to industry.

**Compliance with ethical standards** Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

## Appendix A: Description of data sets

Consumables: food or drinks					
Collection period	Category	Category screener.	Sub-category	Country	Respondents ( <i>n</i> )
July 2015	Bottled Beverages	3 months Purchased at least once in the past:	Carbonated Soft Drinks Water Iced Tea	Norway	602
				Norway	406



Consumables: food or drinks						Household goods					
Collection period	Category	Category screener.	Sub-category	Country	Respondents (n)	Collection period	Category	Category screener.	Sub-category	Country	Respondents (n)
Purchased at least once in the past:											
June 2015	Breakfast Foods	6 months	Cereal Liquid B/fast	Australia	623	Brazil and UK: June 2014	Household Cleaners	12 months	Drain Cleaner	USA	412
December 2014			Cereal	France	400	All other countries: March–August 2015			Bath-room Cleaner	Argentina	600
December 2015				Germany	400					Brazil	401
				Italy	400					France	400
				Spain	400					Germany	401
				UK	400					Russia	400
			Cereal/toaster pastries	USA	400					Thailand	400
February 2015	Coffee	3 months	NA	France	512					UK	600
				Germany	300					UK	403
				Poland	300					Argentina	400
				Russia	300					Brazil	412
September 2015	Chocolate	3 months	NA	Australia	402					UK	406
				Germany	404					UK	400
				Russia	420					USA	404
				South Africa	406					USA	349
				UK	404				Glass Cleaner	USA	400
July 2015	Dairy Products	6 months	Chilled Frozen	Australia	617	April 2015	Insect Sprays	12 months	Insecticide	Italy	402
				Australia	620	June 2015				France	408
August 2015	Snacks	6 months	Cookies Salty Snacks	USA	407					Argentina	421
				Japan	412					Australia	410
				Mexico	407					Brazil	408
				UK	402					China	406
										India	403
										USA	420
Household goods											
Collection period	Category	Category screener.	Sub-category	Country	Respondents (n)				Personal repellent	Argentina	400
Purchased at least once in the past:											
March 2015	Air Freshener	12 months	NA	USA	409					Brazil	403
February 2015	Dish-washing Detergent	Dishwasher in household	NA	France	607					Germany	406
				Netherlands	600	March 2015	Laundry Detergent	12 months	NA	Italy	413
April 2015	Food Storage	12 months	NA	USA	411					USA	410
December 2014	Hair-care	6 months	NA	China	627					USA	409
				India	628						
				USA	622						



## Appendix B: Example of within survey element presentation

	First brand	Second brand	Other brand	None
<b>Logo</b>	Pepsi			
				
<b>Logotype</b>				<input checked="" type="checkbox"/>
<b>HELLO</b>				
<b>Colour</b>	Diet Coke	Diet Pepsi	Sprite	
				

## Appendix C: Asset type inclusion at category level

	B-fast foods	Choco-late	Snacks	HH cleaner	Insect Spray	Coffee	Dish Detergent	Bottled Beverage	Laundry Detergent	Food Storage	Dairy	Hair-care
Logotype	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Product Form	✓	✓	✓	✓	✓	✓	✓			✓		
Character	✓	✓	✓	✓	✓						✓	



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**Ella Ward** is a Senior Marketing Scientist with the Ehrenberg-Bass Institute for Marketing Science, based at the University of South Australia. She has a Bachelor of Management (Marketing), a Bachelor of International Relations and a Masters by Research degree in Marketing.



Ella's primary field of research is Distinctive Assets and brand identity. Specifically, her focus is on the competitive context of brand identity elements and the value of unique assets for brand recognition and retrieval from memory.

**Dr. Song Yang** is a marketing scientist at the Ehrenberg-Bass Institute for Marketing Science at the University of South Australia. He holds a Bachelor of Economics and a Master of Economics from Renmin University of China in Beijing, and a Ph.D. in Marketing from the University of Western Australia. He has published widely in academic journals, and his research interests include consumer behaviour under cultural influence, consumer value changes in China, brand management and research methodology in marketing.

**Professor Jenni Romaniuk** is a Research Professor and Associate Director (International) with the Ehrenberg-Bass Institute for Marketing Science, based at the University of South Australia. Her areas of

research expertise are around Brand Equity, Distinctive Assets, Brand Health measurement and word of mouth. She has authored two books How Brands Grow Part 2, and Building Distinctive Brand Assets, both published by Oxford University press. Her work has been published in a wide range of journals and she regularly speaks at international conferences.

**Dr. Virginia Beal** is a Senior Marketing Scientist at the Ehrenberg-Bass Institute based at the University of South Australia. Her research focuses around advertising effectiveness, media scheduling and luxury brands. Her work has been published widely in academic journals and she spent several years working in the media sector prior to joining academia.

