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# Purchase decisions in a busy, busy world: A behavioral science perspective

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An Ipsos Marketing **Point of View**

by Colin Ho, Ph.D., and Namika Sagara, Ph.D. • March 2018

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Ipsos Marketing

# Purchase decisions in a busy, busy world: A behavioral science perspective

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If you have ever read Richard Scarry's "Busy, Busy World" or "Busytown" to your kids, you may remember the colorful and delightful illustrations. Scarry's illustrations show human-like animal characters bustling about, preoccupied and engrossed in their social and occupational roles. It is an apt metaphor for modern life. Little did the author know that life would become even more hectic some fifty years later. Since the publication of "Busy, Busy World" in 1965, we are now tied to work 24/7, have access to more information and choices than ever before, and are constantly barraged by digital advertising.

It is within such a world that consumers must make decisions. As much as we would like our decisions to be thoughtful and fully considered, the large amount of information, lack of time and our limited mental capacity make it difficult to do so. To consider all the available information would not be practical or possible. Instead, we base our decisions on singular pieces of information (i.e., simple rules of thumb or heuristics), allowing us to quickly decide and move on to the next task (e.g., Cialdini, 2007).

While our description of rapid versus more effortful choice mirrors the System 1 and System 2 thinking proposed by Kahneman (2011), we focus specifically on brand perceptions and decisions that would rely more on System 1 like processes. Our framework explains how consumers make brand choices when they do not have the mental capacity and/or motivation to engage in more deliberate thinking. Such situations typically include low involvement categories (e.g., fast moving consumer goods) or more generally, situations where a wrong decision is inconsequential (e.g., monetarily or psychologically). The key idea of the framework is simple: The *content* of our memories and the ease with which these memories come to mind (salience) serve as heuristics that influence the choices we make.

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## Salience of Information

We begin with the concept of salience. With so much information available and limited mental capacity, we cannot possibly attend to and process all the information around us. Among all the information available, only some will catch our attention for purchases. The concept of salience is important as salient information influences the decisions we make. Before we begin, however, we distinguish between perceptual salience (what we see in our environment) and memory salience. We discuss only memory salience in our paper, focusing on the accessibility of brands from memory (i.e., brand salience) and the information we recall about each brand (i.e., brand associations).

## Brand Salience

We define brand salience as the likelihood of a brand coming to mind spontaneously when a consumer is considering a purchase, similar with the idea proposed by Romaniuk & Sharp (2004). Brand salience is critical to brand choice. If your brand is not thought of or considered, it is unlikely to be purchased. When consumers think about what they would like to purchase, it generally begins with a set of brands or alternatives that come to mind for consideration. Prior work has shown that the link between salience and consideration set inclusion is positively correlated (Nedungadi, 1990).

Two aspects of brand salience have important marketing implications: 1) The number of brands salient at any one moment and 2) the specific brands that become salient. The former informs marketers of the size of the competitive set and the latter informs marketers whom it is that they truly compete with.

## Number of salient brands

Memory research has shown that we can hold only between three and seven pieces/chunks of information in our mind at any one time (Cowan, 2000). Prior work has shown that the typical number of brands considered is consistent with these findings. Indeed, Hauser and Wernerfelt (1990) found the average consideration size set for beers was three and the average consideration size set for soft drinks was five. These findings support the notion that people have limited mental capacity and pay attention to only a few things at any one moment. The marketing implication is important—even with many choices available on the market, we consider only a very small fraction of those alternatives at any one moment. The idea of a consideration set has always been central to Ipsos' brand equity solution. In our Brand Value Creator equity solution, we collect and analyze brand equity metrics only among brands that are in each consumer's consideration set (Hannay & Nicks, 2016).

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A limited consideration set is consistent with behavioral science theories. Consumers strive to simplify their decision environment in a complex world (Wright, 1975). A small consideration set is advantageous to the extent that decisiveness in decision making is important. There is an evolutionary survival advantage in paying attention to a relatively small number of important things and not being distracted by unnecessary details that interfere with rapid decision making (e.g., where is that lion and where is the closest tree).

## Which brands are salient? The role of brand associations.

We know from research that we recall information from memory when we are exposed to a stimulus or cue that acts as a memory “trigger.” For example, if we hear a song we have not heard in a while, the song may trigger memories of a past event associated with the song. Similarly, the whiff of a perfume may remind us of a person from our past.

In a similar vein, cues in our environment or psychological/physiological needs can trigger specific brands to come to mind. For example, if you are at the beach and want a beer, the beach surroundings may bring the Corona brand to mind given that you have experienced repeated pairings of the brand with that context in its communications. Stimulus/cues are not restricted to what we see or hear. A psychological or physiological need can also trigger recall of a brand. For example, if you are perspiring in the sun, Gatorade may pop into your mind due to repeated pairings of the brand with perspiration and replenishment of electrolytes. The above examples illustrate that the greater the number of associations we have with a brand (e.g., beach, perspiration, electrolytes replenishment), the more likely a brand will come to mind for consideration. To be more precise, we should stipulate that it is the total number of *positive* associations that will increase consideration. Each positive association or combination can serve as a trigger for consideration. Negative brand associations are unlikely to increase consideration.

Of course, there are factors besides marketing messages that determine what we associate with a brand. Brands that people use and buy frequently are more likely to come to mind because of repeated pairings of the brand with life experiences. That is, repeated brand usage results in a brand being associated with things in a person's life (e.g., time of day, environment where the brand is used, people they use the brand with). As an example, consumers often associate brands that have been around a long time with their childhood or their parents. In general, more usage means more experiences with the brand, which in turn increases consumers' brand associations. Because each of these associations can spur memory or recall of a brand, they will be more salient to consumers.



## Salient Brand Associations and Final Choice

Although brand salience is important, it is not the only factor that determines the final choice. Once salient options have entered consumers' consideration, they must select one. At this point, consumers' choices are determined by the salient beliefs or associations they have about each brand in their consideration set. To illustrate, consider a hypothetical case where I am deliberating where to have a quick lunch. Two restaurants come to mind without much prompting: Chipotle and Panera Bread. For Chipotle, I immediately think of the fresh ingredients in their burritos but also the recent food safety incidents. In the case of Panera Bread, I think of healthy sandwiches. In the end, due to my focus on health and concern with food safety, I would likely go with Panera Bread. The idea that salient brand associations can influence our thinking is consistent with Kahneman's belief that System 1 is driven by memory associations (Kahneman, 2011). In Morewedge and Kahneman (2010), the authors specifically identify System 1 with the automatic operations of associative memory.

We make a distinction between brand salience and *salient brand associations* as doing so provides a more complete picture of how consumers make decisions and allow us to predict situations where the most salient brand may not be the final choice. That is, due to specific brand associations, it is possible that brands with a lower salience will become the final choice. Consider national brands versus private labels. Due to national brands' greater marketing budget and presence, consumers are more familiar with them and, consequently, they have richer sets of associations for them. Therefore, we would expect national brands to be more salient than private label brands. However, other factors can influence the final choice. For example, one might weigh a private label's lower price more when making a final choice even though a national brand may be more salient.

In sum, brand associations serve a dual function: they facilitate the retrieval of a brand from memory for consideration but they also serve as the reasons for final choice. Having laid the groundwork of our working model, we now illustrate the concepts of brand salience and brand associations from our research findings.

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## The Importance of Brand Salience

### Brand Salience and Market Share

We operationalize brand salience as the percentage of respondents for whom a brand comes to mind when asked an open-ended question of what brands come to mind when *considering a purchase*. We refine this by capturing the order in which a brand comes to mind, allowing us to measure brand salience on a continuum for each person (i.e., first recalled, second recalled, third recalled). The use of free recall along with the order of recall has been validated as a measure of associative strength in memory (Lynch & Srull, 1982; Fazio, Williams, & Powell, 2000).

Using this measure, we show that market share is highly correlated with brand salience. Specifically, brands that were first to come to mind are more likely to have larger market shares (Figure 1). *All else being equal*, the first brand that pops into our minds is likely to be our final choice. That is, decision makers satisfice, selecting the first option that meets a given need rather than spending more time and effort on finding an "optimal" solution (Simon, 1956). We return to this "all else being equal" assumption later in the paper.

Figure 1a – Cell Phone

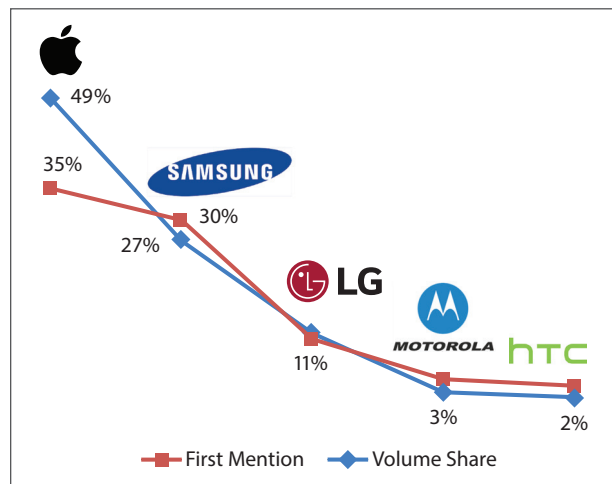


Figure 1c – Oral Care (masked example)

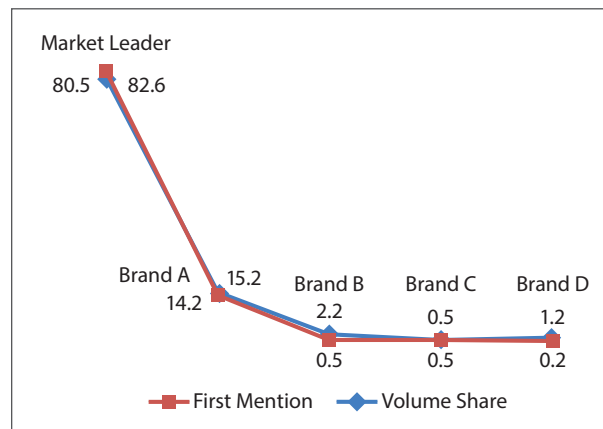
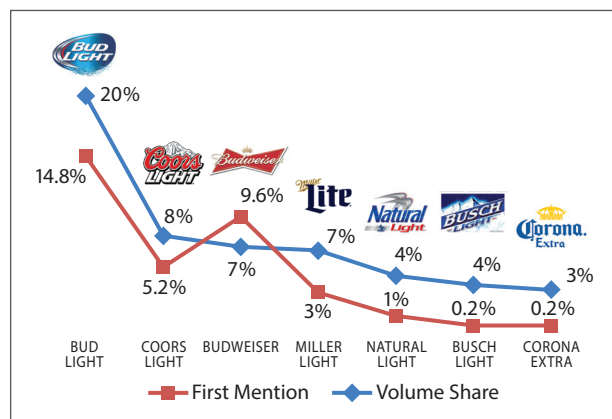


Figure 1b – Beer



*Decision makers satisfice, selecting the first option that meets a given need rather than spending more time and effort on finding an "optimal" solution (Simon, 1956).*

## What Drives Brand Salience

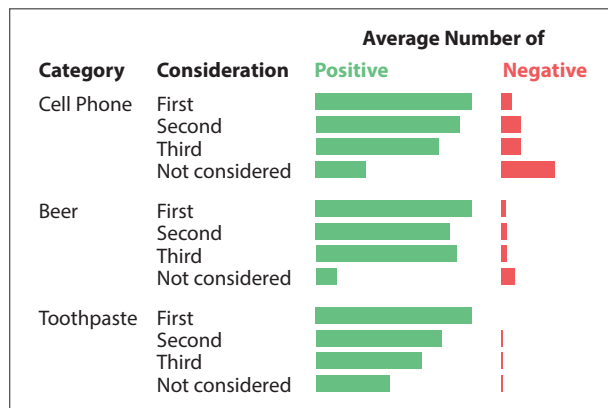
We now turn our attention to the link between brand associations and brand salience. We hypothesized previously that ease of recall depends on the total number of positive associations. To examine this, we looked at consumers' brand associations and how those associations relate to brand salience. In addition to asking an open-ended question on what brands come to mind when considering a purchase, we asked consumers open-ended questions to understand their associations for each brand that came to mind.

We utilized open-ended questions instead of asking respondents to check off a list of brand attributes as we wanted to assess brand associations *salient* to them, not their responses to a list of pre-defined and/or standardized brand attributes. Open-ended questions are also less likely to produce biased responses caused by priming/framing. The open-ended brand association questions were asked for brands that came to mind for consideration and for those that consumers did not spontaneously consider. This allowed us to look at brand associations across the entire brand salience spectrum: from first and second brand considered to unconsidered brands.

We text-analyzed responses to this second open-ended question and then computed simple brand association measures: the average number of positive and negative associations for considered and unconsidered brands. We looked at positive associations separately from negative associations as negative information plays a very different psychological role than positive information (e.g., Baumeister et al., 2001).

Our hypothesis was supported: increased brand salience was correlated with increased positive brand associations (Figure 2). Greater brand salience was accompanied with more positive associations. Brands with a greater number of positive associations provide more cues for the brand to be retrieved from memory and hence, considered for purchase. The converse was true for negative associations. Negative associations increased as brand salience decreased.

**Figure 2 – Average number of positive and negative associations**



## Market Share and Brand Associations

Our findings show that market share is linked to brand salience, and that brand salience is linked to brand associations (average number of positive associations). One may be tempted, in turn, to deduce that market share is directly linked to brand associations. We caution against this as there are many mediating factors between market share and brand associations. One we have just seen is that the relationship between brand salience and brand associations depends on the valence of the

associations (i.e., positive or negative). A second is that to attain a high market share requires first and foremost, a high brand salience. A brand with many associations but with low brand salience cannot attain a large market share. To illustrate this second point, consider the findings from two beer brands in a 2015 study: Bud Light and Stella Artois (Figure 3).

**Figure 3 – Bud Light and Stella Artois**

	Average Positive Associations among consumers for which brand is salient	Average Negative Associations among consumers for which brand is salient	Brand Salience	Market Share (2015)
Bud Light	2.01	0.14	10%	20%
Stella Artois	2.04	0.04	3%	0.5%

Bud Light is the market share leader while Stella Artois has a much smaller market share. We see that the average number of positive associations does not explain market share as they are essentially identical across the two brands. The negative associations also do not align with market share. In contrast, brand salience is more aligned with the market shares of the two brands. In short, more important than the average number of associations is the percentage of people *who are brand considerers*.

Viewed another way, among those for whom Stella Artois is salient (the 3%), consumers who consider Stella Artois have as many positive associations of the brand as those who consider the market leader, Bud Light. However, because Stella Artois' brand salience is much smaller than Bud Light's (3% vs. 10%, respectively), Stella Artois' share is lower than Bud Light's. This is typical of niche brands—high number of associations but low brand salience. All that said, the number of salient brand associations for niche brands while not contributing significantly to market share is still an indicator of a strong brand in that among its considerers/users, the niche brand is likely to come to mind for purchase consideration.

In sum, we have shown that while market share appears to be predicted by brand salience, and brand salience is predicted by the number of associations, the relationship between market share and number of associations is a more complex one.

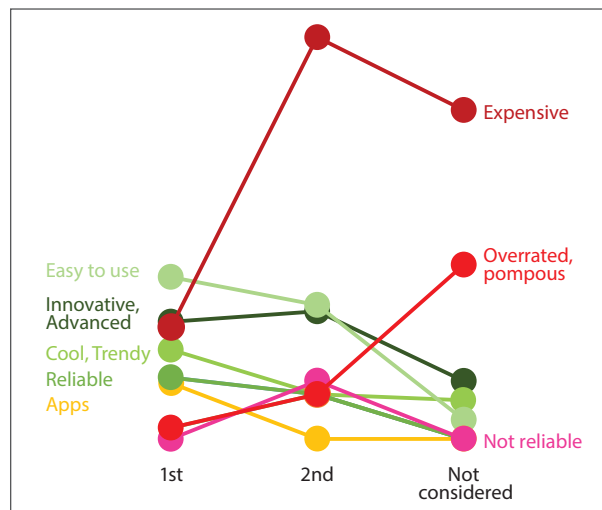
## Brand Salience and Brand Associations

We have seen that greater brand salience is accompanied by a greater number of positive associations and fewer negative associations but have yet to examine the specific nature of these associations. What do these positive and negative associations consist of? Are brand associations emotional or more functional? To shed light on the answers to these questions, we share our findings for three market leaders: Apple, Bud Light and the market leader in an oral care category.

### Apple: Cool or Overrated?

For consumers for whom the Apple brand comes to mind first, the brand is associated with “easy to use,” “innovative advanced technology,” “cool, trendy,” “reliable” and “apps” (see Figure 4). “Cool, trendy” is an emotional association that likely contributes strongly to the brand being more accessible in memory. For consumers for whom Apple was the second brand considered, the positive associations were weaker (compared to the first position). Importantly, negative brand associations were also stronger in the second position versus the first. “Expensive,” “overrated, pompous” and “not reliable” increased in the second position. For respondents who did not spontaneously consider Apple, the primary associations with Apple were “expensive” and “overused, overrated, pompous.” There is a noticeable lack of positive associations among those who did not consider Apple. More generally, these brand associations provide insights into the evaluation/decision criteria that consumers use when evaluating brands in the cell phone category.

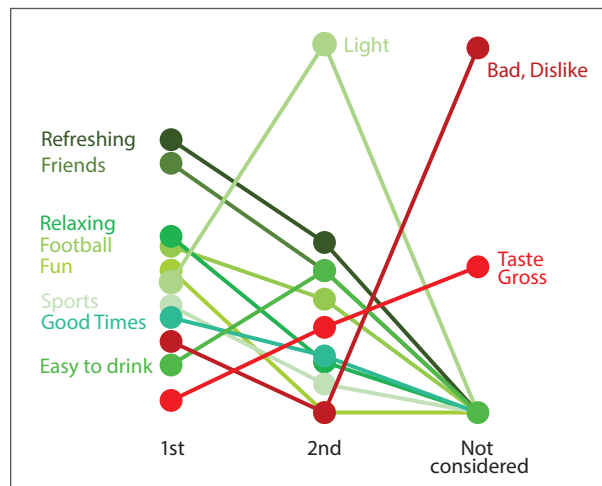
**Figure 4 – Brand Associations for Apple Brand by Consideration**



### Bud Light: Buddy or just a light beer?

For consumers whose first considered brand was Bud Light, we see many emotional associations: “friends,” “relaxing,” “football,” “fun” and “good times” (see Figure 6). Together, these associations conjure up the image of hanging out and friendship. The profile for Bud Light, however, is more functional in the second position. For consumers for whom Bud Light is the second brand considered, the brand is viewed mostly as a light beer and easy to drink. There is a noticeable drop in emotional associations going from the first to second position (e.g., friends, good times). Again, for consumers who did not consider Bud Light, there was a discernible lack of positive associations and the emergence of strong negative associations (bad, taste gross).

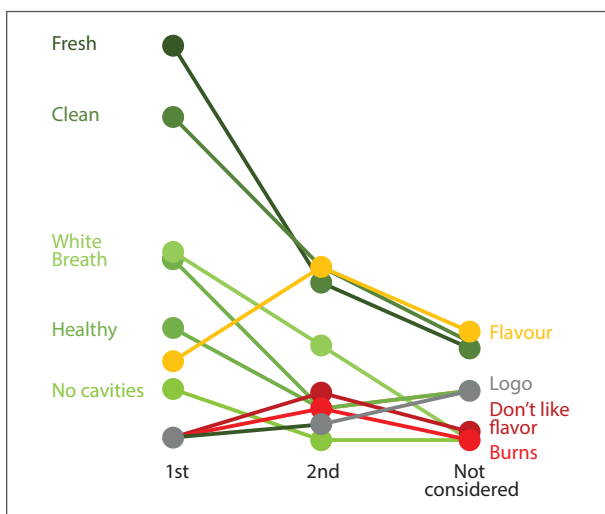
**Figure 5 – Bud Light Associations by Consideration**



## Oral Care Market Leader: It's all in the taste?

For consumers for whom the market leader is the first considered brand, it is associated with the “prototypical” oral care benefits: fresh, clean, white, breath, healthy and no cavities (Figure 6). While mostly functional, many of these benefits are also implicitly associated with emotions (e.g., confidence).

**Figure 6 – Oral Care Market Leader Associations**



In contrast, for consumers for whom the market leader was the second brand considered, the positive associations were considerably weaker. As in the findings for Apple, negative associations emerge in the second position: “Don’t like flavor” and “burns.” For these consumers, dislike for the market leader’s taste or any perceived burning sensation are likely the key reasons why it was the second and not the first brand considered. For consumers who did not consider the market leader, positive associations were weak.

*While the number of associations drives brand salience, it does not guarantee a strong market share.*

While brand associations varied depending on the brand and the product category, clear patterns emerged. In all three case studies, brands considered first had a prevalence of positive associations. Brands considered first also tended to have more emotional associations (e.g., cool, fun). As negative associations increased, brand salience decreased. Behavioral Science has shown that negative associations drive our choices more than positive ones—so understanding them is critical for brand managers (Ho & Bane, 2015).

## Specific brand associations can compensate for weak brand salience

We have made the case that brand salience is strongly predictive of market share and is a construct worth understanding and measuring. The number of positive and negative associations, and the functional versus emotional content of these associations contribute to brand salience. We now return to the point that a higher brand salience would lead to higher market share.

In a project that involved both a private label and a national brand, the “all else being equal” assumption was tested. In this project, we looked at the number of positive associations for a national brand and a private label. While the national brand had far more positive associations, the private label led in market share by a large margin. The lower price/value association with the private label in this case led consumers to overwhelmingly select the private label. In short, while the number of associations drives brand salience, it does not guarantee a strong market share. We have focused on the role of memory salience and its link to consumer behavior. Clearly, there are other factors that determine whether a consumer ends up purchasing a product as well. In this case, it was price but there are also other market effects that can impact purchase (e.g., availability). At Ipsos, we assess these market effects within our Brand Value Creator product (Hannay & Nicks, 2016).

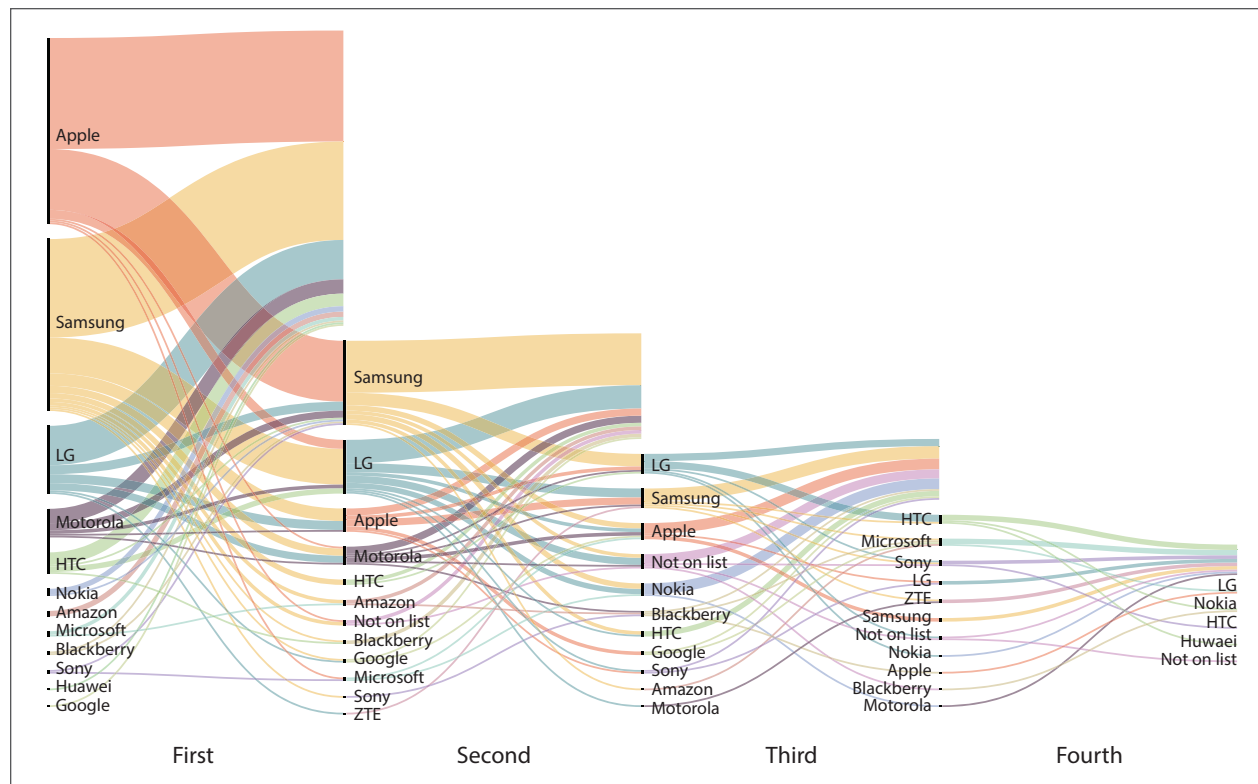


## Discussion

We proposed a framework for understanding how consumers make decisions when purchasing brands. This framework provides marketers with a powerful way of answering two strategic brand management questions: Whom do I compete with and how do I compete better? The first question is answered by looking at brand salience. Key competition can be defined as the brands that come to mind with your brand. But we can understand this competitive set even more deeply by also understanding the *order* in which competitor brands come to mind relative to your brand. As an illustration, consider the order in which cell phone brands come to mind for purchase consideration (Figure 7).

*Too often, every other brand in the category is considered a competitor. Knowing that a consideration set is only about four or fewer brands allows us to hone in on who competes most with our brands and develop more precise positioning.*

**Figure 7 – Order in which cell phone brands come to mind**



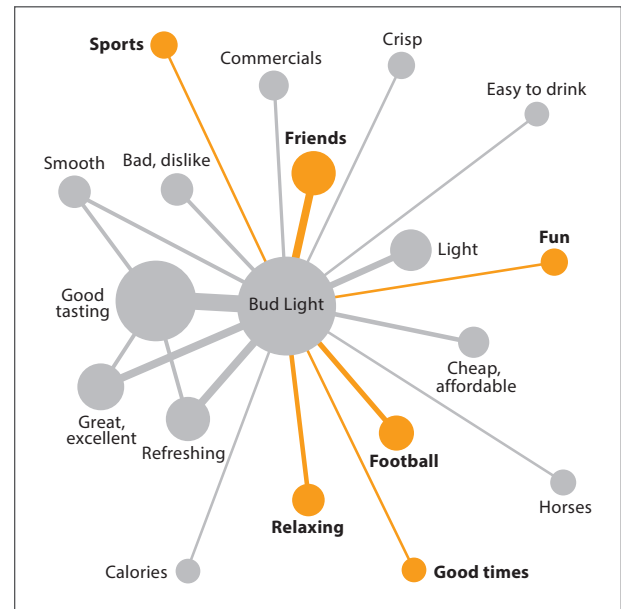
*Brand associations, therefore, are more than points of positioning. They also serve as memory triggers of a brand. The Bud Light example also illuminates that brand associations are so much more than just functional benefits.*

Reflecting its market leader position, Apple is the most salient brand (35% brand salience in the first position). For more than half of these consumers, Apple is the ONLY brand considered (part of red flow that does not go to another brand in the second position). This is an enviable position as it means that Apple has essentially no competition among these consumers! When a second brand is considered after Apple, Samsung is the key competitor. When we look at Samsung, the pattern is a little different. While Samsung does have consumers for whom it is the only brand considered (part of orange flow that does not go to another brand in the second position), the second brand considered after Samsung is LG, not Apple. The interaction between Apple and Samsung, therefore, is asymmetrical. Once key competitors are known, positioning strategies can be developed. Too often, every other brand in the category is considered a competitor. Knowing that a consideration set is only about four or fewer brands allows us to hone in on who competes most with our brands and develop more precise positioning.

While brand salience provides insights into whom a brand competes with most, brand associations provide brand managers with the information on how to compete better. The notion of using brand associations for positioning is one that most brand managers are familiar with so we will not discuss this here (e.g., Aaker, 1991). What is new, however, is viewing brand associations as *memory triggers* for purchase consideration. Consider Bud Light's brand associations (Figure 8).

*Imbuing a brand with positive associations and removing negative associations from a brand are two very different tasks, requiring very different marketing strategies.*

**Figure 8 – Bud Light brand associations**



Bud Light's brand associations suggest that when it comes time to choose a beer for Monday night's football, Bud Light has a better chance of being selected than other brands. Bud Light's football and social occasion related associations (football, sports, friends, relaxing, fun, good times) are likely to activate Bud Light from memory as the brand to be consumed for Monday night's event. Brand associations, therefore, are more than points of positioning. They also serve as memory triggers of a brand. The Bud Light example also illuminates that brand associations are so much more than just functional benefits.

The other insight that we believe is new (or at least often ignored) is the concept of negative associations. Many marketers and researchers have focused on positive associations to the exclusion of negative associations. While it is important to draw consumers to a brand/product with its benefits, it is equally as important to understand the barriers that hold them back. Oftentimes, it is not the lack of desirable qualities in a brand but the presence of undesirable qualities that hold consumers back (Ho & Bane, 2015). Imbuing a brand with positive associations and removing negative associations from a brand are two very different tasks, requiring very different

marketing strategies. In today's world, where negative news spread in an instant, the recent few years provide numerous examples of brands that are negatively perceived (e.g., British Petroleum, SeaWorld, Volkswagen, United Airlines).

Finally, from a methodological perspective, we have shown that open-ended questions provide marketers with a way of capturing *individualized* and *idiosyncratic* brand associations. Brand perceptions vary from one person to another because we all have unique experiences. Because brand associations can be anything linked in memory to a brand (e.g., a feeling such as having fun, a lifestyle such as a luxurious one, an activity such as exercise, or even an advertising jingle) they cannot easily be captured using a standardized attribute list or even one generated by a skilled researcher. This is particularly important when we are looking at segments that may differ substantially from one another in terms of brand perceptions (e.g., millennials versus Generation X). In such situations, a standardized attribute list may be woefully inadequate in capturing the differences in brand perceptions. We believe that our methodology provides critical insights into the link between brand associations, brand salience, and System 1 decision making.

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