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Color-Coding Consumer Cognition: An Examination of Brand Analysis Auras

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Abstract

Brand perception is central to understanding the consumer. Consumer behavior and brand strategy scholars have established a collection of credible concepts examining brand cognition. Yet, often these extensive studies result in exacting taxonomies that can complicate the analysis of consumers' brand perceptions. To complement and extend the aims of existing consumer brand perception research, this study introduces a stepwise qualitative conversion technique for color-coding key consumer cognition patterns. By translating logical (IQ) analysis into emotional (EQ) aesthetics, color-coding improves brand strategists' analytical affinity and application ability. This study performs qualitative analysis of seminal consumer cognition frameworks to address three hypotheses:

a) Does color-coding accuracy capture the intent of consumer brand cognition array frameworks?
b) Are color-coding aesthetics consistent with brand analysts' intuitive affective feelings?
c) Do color-coding application techniques improve brand strategy analysis functions?

The resulting model embeds emotive aesthetics to enhance strategic brand analysis of consumer cognition.

Introduction

All humans think in color. Color adds emotional auras to the mind's analytical process. Wherever you reside – in the valley, mountains, city, or coast – the natural environment teems with amazing hues. A chromatic cornucopia provides visual pattern clues, from blue sky and water, to evergreen, aspen yellow, maple red, lavender jacaranda trees, and the multicolored fauna and flora. Like romantic poets, keen brand strategists focus on nature's color spectrum to decipher the brand meanings in consumer minds.

For global brand managers, decoding the colors of target consumers' cognition is essential to align product messages with people's minds. Besides attuning brands to consumer attitudes, color coding simplifies interpreting cognitive perception patterns. The consumer cognition models used for brand decisions can be a complex maze of classifications. When classifications of customer research data become confusing, 'analysis paralysis' delays and detracts from clear eyed perceptual interpretations.

Although meanings derived from nomological classifications and analytical calculations rely largely on rational intelligence (IQ), consumers' minds are largely influenced by emotional intelligence (EQ) factors and conditions (1). As a result, consumer cognition models have been extended to incorporate thinking/logical and feeling/affective determinants of behavior (2-3). In that vein, this study advances the interpretation of consumer cognition models by incorporating color as affective clues to data measures and aesthetic cues to analytical meanings. Accordingly, the proposed model introduces color-coding to convert consumer cognition arrays from brand data identifiers into brand mood/auras improving the efficacy of brand strategists' interpretations. Using color to design affective signals for brand strategists differs from the more common research on affect aimed at consumers' cognitive emotional states (4, 5). Therefore, this examination of brand analysis auras emulates the emotional and customer intelligence competencies of the professional marketing Martec Group (6).

This color conversion study is limited to four leading consumer cognition models using visual arrays for classifying and plotting empirical data. Multiple academic fields are perused to select color systems that preserve the accuracy of IQ facts/data with the hues used as EQ cues. In addition, these established color systems formulate color for precise aesthetic appearance and affective activation. In that regard, the color-coding is described as an emotive aesthetic that complements logical data analytics by availing a new technique for brand strategists to balancing thought sensing with sensory feelings. These uses of EQ sensing in concert with IQ skills have been found to raise marketing effectiveness (7). Moreover, art and creative aesthetics are instrumental in activating EQ (8). Throughout the discussion the synonymous terms logical and cognitive/cognition are used interchangeably.

The following discussion provides a critical literature review of four seminal research frameworks developed to visually image consumer cognition. Within this critical review, cognitive intelligence (IQ) classifications of the consumer mind are converted to emotional intelligence (EQ) color-codes, to design brand strategy inference cues. This original color-coding conversion technique is integrated into the explanation of consumer cognition models.

Literature/Methodology – Critical Review & Cognitive Model Conversion

Much has been studied, written, and practiced in the area of brand strategy. The intent here is not to revisit those comprehensive lessons. Instead, a critical literature review identifies frameworks that are commonly used by brand strategists as either measurement typologies or mapping topologies of consumers' brand perceptions/attitudes. The selected consumer cognition frameworks are examined and placed in a preordered sequence for practical application as a brand analysis narrative. Thus, this review distills seminal consumer cognition concepts into a brand analysis narrative for converting IQ analytical categories into EQ aura colors.

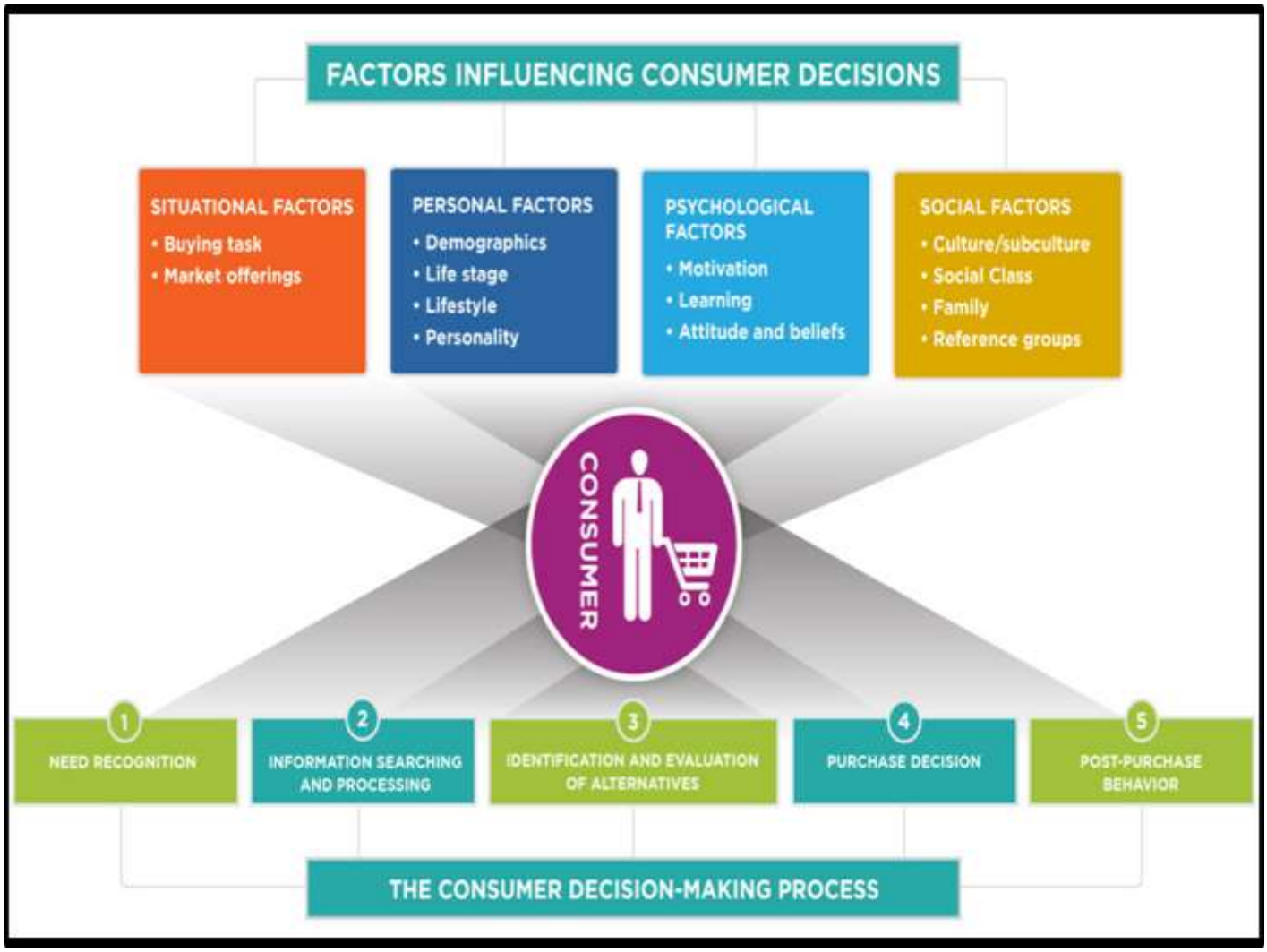
Consumer Decision Process (CDP)

Perhaps the most widely known consumer cognition framework is the Consumer (Purchase) Decision Process (CDP) five stage model (9, 10) -- which incorporates the Theory of Buyer Behavior (11), shown in Figure 1.

Figure 1: Consumer Decision Process Model

The focal CDP stages are posed as a cognitive sequence that continuously filters four types of influences – situational, personal, psychological, social – as a way of facilitating symbiosis between the consumers' market and non-market directed intelligence flows. This holistic framing of CDP stages is show below in Figure 2.

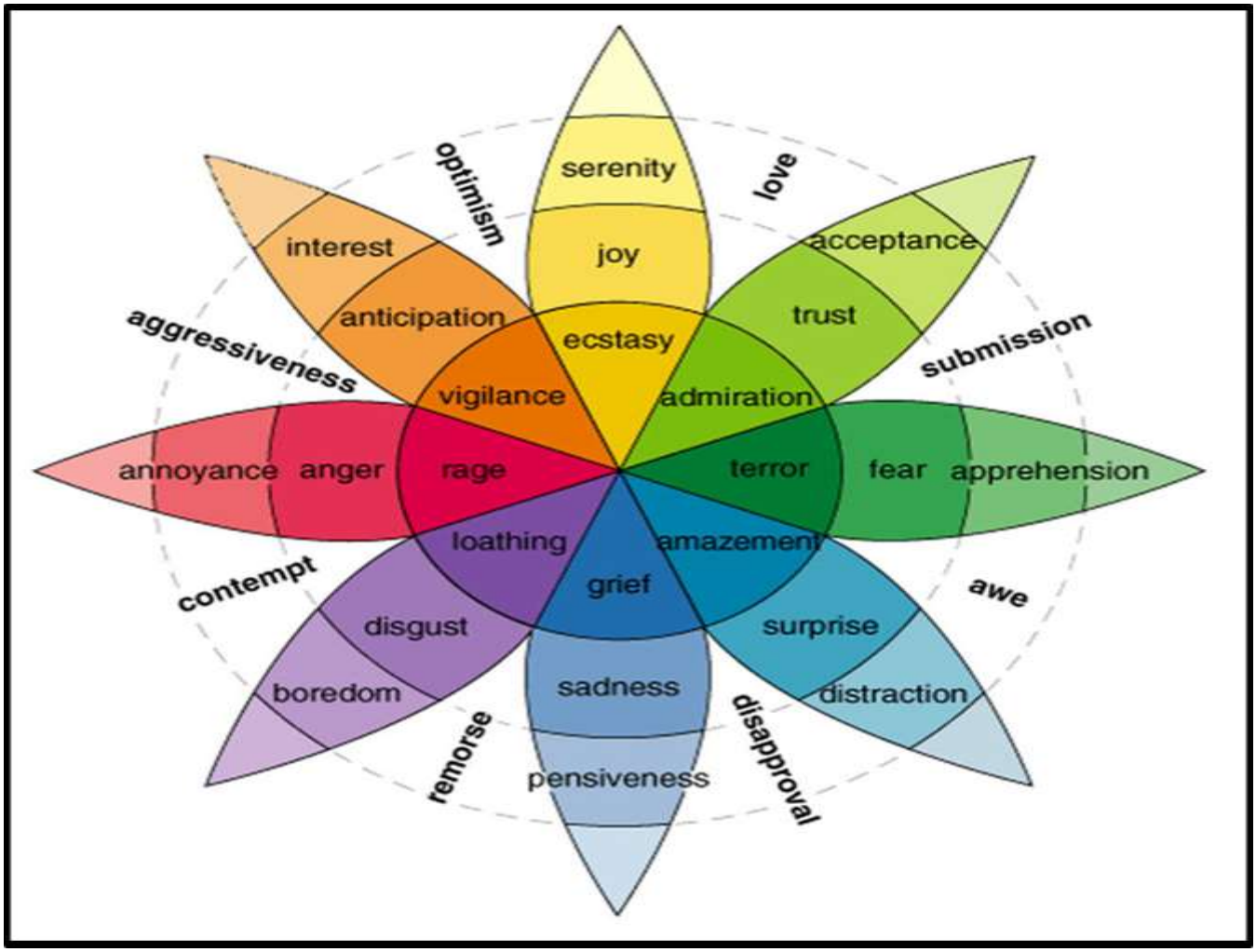
Figure 2: The Market Directed CDP Filtering Non-Market Directed Influences



While the logical progression of CDP stages is cogent, the influence of emotional states through the process has not been directly addressed. Indirect emotional influences have been widely conceptualized as operating through factors like involvement criteria (intensity and valence), the external cultural and social circumstances, the internal personal and psychological components, and the situational time, space, task and stimuli conditions.

Mood has been particularly instructive in capturing the convergence of these four general categories of emotional influence on consumer decision making. Mood contains involvement domains, external social-cultural dimensions, internal personal-psychological determinants, and situational descriptors. So, mood states attributed to different color signals offers a credible method for overlaying the CDP stages. Emotional moods have been structured into a matrix/wheel of eight basic states corresponding to a color spectrum (12-14). This "Mood Matrix" and "Matrix/Wheel" is formed by intersecting the valence (unpleasant/pleasant) and activation (aroused/unaroused) of emotional influence, as shown below in Figure 3.

Figure 3: Color Matrix/Wheel of Human Emotions (Circumplex)



(Sources: Plutchik & Conte, 1997. Circumplex Models of Personality and Emotions; Plutchik, 1980. Emotion)

Returning to the CDP, an emotional color continuum can be overlaid onto the five-stage sequence as charted by the two axes of valence (negative/positive) and arousal (low/high). Beginning with a negative emotional valence of unpleasantness due to discrepancy between present and preferred mental modes, "need/problem recognition" can be reasoned to occur equally with low arousal (purple) from remorse, and with high arousal (blue) from disapproval. Next, as consumer minds progress through "information search" memory/market inquiry and intensive "evaluation of alternatives" a mid-range of moods (green) with more positive emotional valence and higher attentive arousal evident during these active finding (awe) and filtering (submission) mental modes.

Then, as the promise of need/problem satisfaction nears, the "purchase" stage reaches the brightest (gold) positive emotional valence (love, optimism) with balanced arousal. Ideally, the "post-purchase" stage confirms the "purchase" mood with the high emotional valence of optimism and satiated arousal shown by a deeper sun ray tone (amber). Conversely, dissatisfaction causes the "post-purchase" stage to enter negative emotional valence with low arousal – resulting in aggressiveness and contempt (red). It is also important to note that published CDP exhibits in various colors are solely differentiating between stages and not signaling mood/emotional progression with a designated color spectrum. This purposely color-coded CDP diagram is shown in Figure 4.

Figure 4: Color-Coded Consumer Decision Process (CDP) Stages

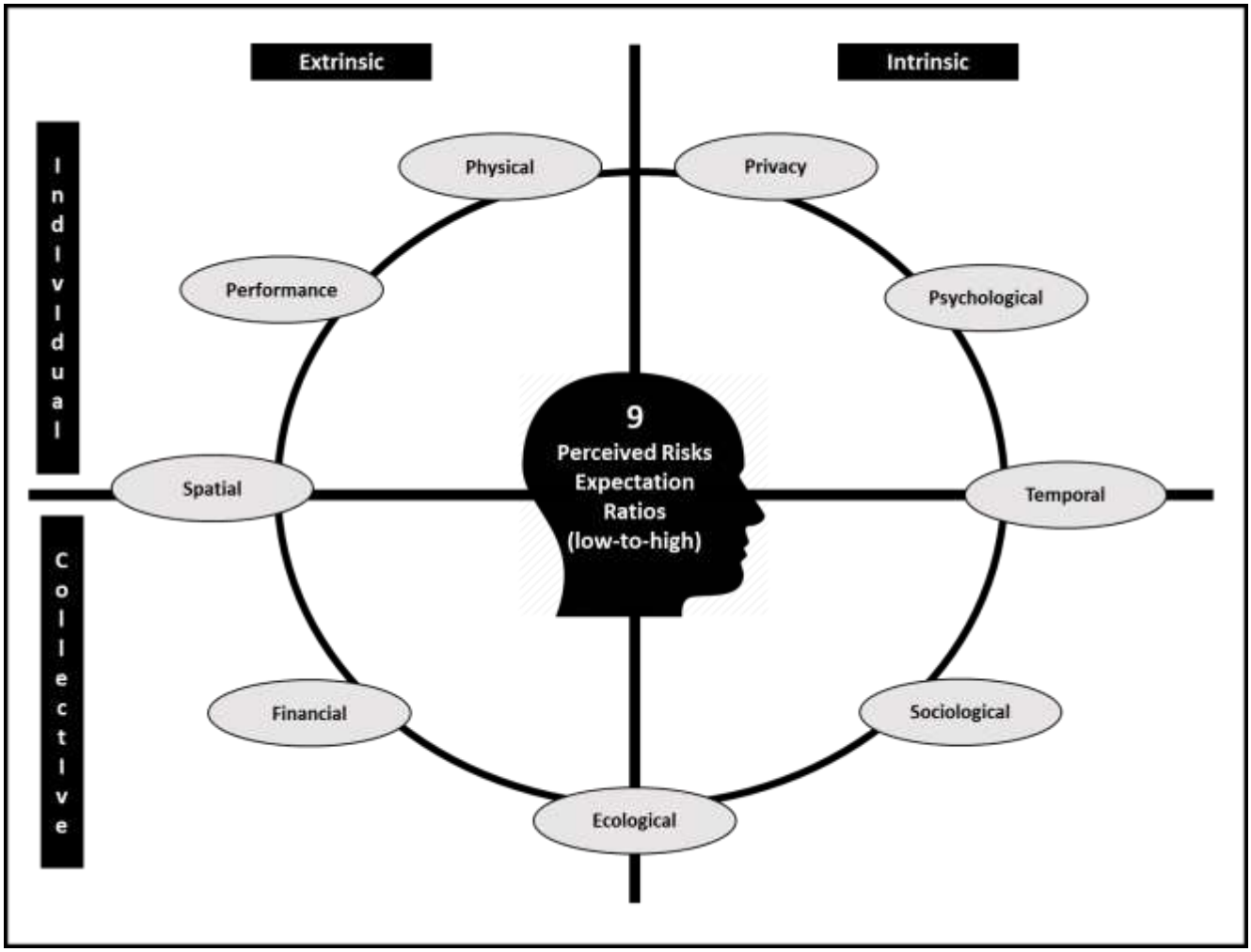
This method of color-coding transforms the logical (IQ) CDP stages into an emotional (EQ) mood spectrum. As a brand strategy heuristic, the color-coding reliably converts descriptive choice stages into prescriptive charm shades. In order to arouse delight in consumer cognition, brand strategists should follow the adage, increase the message intensity when the mind is cool (blue, green), and increase message clarity when mind is hot (gold, red). Although this color-coding guidance is relatively simple, much like the common traffic light, it contributes responsive surety to the complex array of consumer decision making factors that brand strategist encounter.

Consumer Perceived Risks

Simultaneous with development of the Consumer Decision Process (CDP), another model of decision making emerged that visually mapped cognitively perceived consumer/market interaction risks. This theory of consumers' perceived risks was formulated by Bauer (15) and subsequently updated and extended by leading consumer behavior scholars (16-20). Unlike the CDP's sequential cognitive progression, the Consumer Risks portray a synchronized cognitive portfolio. Like tonal patterns, the risks are mentally arranged like musical chords to attune market interactions and branch choices with subconscious perceptions, motives, beliefs, and attitudes. More than anything, the Consumer Risks reveal cognitive expectations as combinatorial patterns rooted in both collective ethos and personal experience. On an intuitive mental scale, consumers estimate the ratio of input costs to outcome benefits for market choices.

The portfolio of risks represents a complete circle of angles associated with consumers' perceived selections, states, and situations. Beginning with Bauer's (15) original four risks of psychological (identity/ego), sociological (belonging/philo), performance (function/potentia), and financial (monetary/nummus). They form the base of the portfolio circle like a foundation block. Subsequent study and deductive logic yielded five additional risks for physical (safety/injuria), information (privacy/secretum), limited time (tempus), preferred physical/digital space dimensions (domain/locus), and the natural ecology (earth/terra). Figure 4 presents an original configuration of these later five risks around the initial four risks is arranged according to their extrinsic/intrinsic orientations (horizontal axis) and individual/collective objectives.

Figure 5: Visual Configuration of Nine Cognitive Consumer Risks



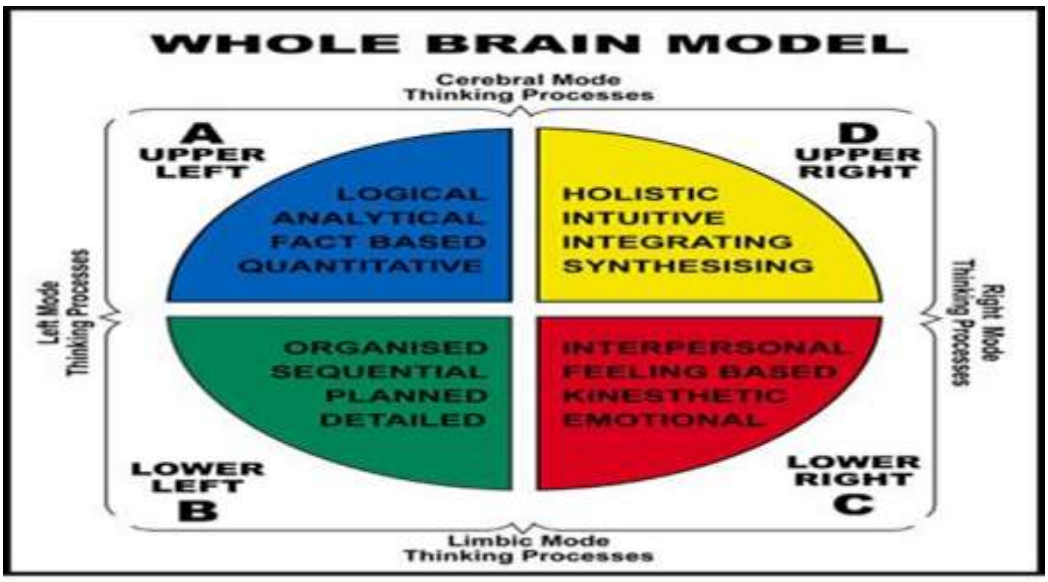
Once the nine Consumer Risks are logically (IQ) configured, then an emotional (EQ) color spectrum can be aligned with the portfolio of cognitive meanings. This conversion of Consumer Risks from mental factual attributes into mood feeling auras parallels the procedure for color-coding CDP stages. However, for the portfolio of Consumer Risks the heat index of hues is a paint palette pattern and not a progression of color shades. In particular, color auras are assigned to four risk/mood quadrants formed by the intersection of extrinsic/intrinsic and individual/collective dimension axes.

Applying the Herrmann "Whole Brain Model" (21) and psychological research (22, 23), a color quadrant wheel palette is designed for the Consumer Risks by assigning bio-emotional-cognitive states to color quadrants.

> Whole Brain technology provides a basis for measuring these different preferences by determining the degree of dominance that has developed among the four thinking structures of the brain. These parts consist of the two cerebral pairs (hemispheres) and the two limbic pairs (limbic halves). All four of which are massively interconnected. Taken together, these represent a whole brain divided into four equal quadrants, designated A, B, C, D." (21)

Figure 6 shows the Whole Brain Model architecture as a quadrant color scheme of manifested Mode States.

Figure 6: The Whole Brain Model Quadrant Color Architecture and Mode States



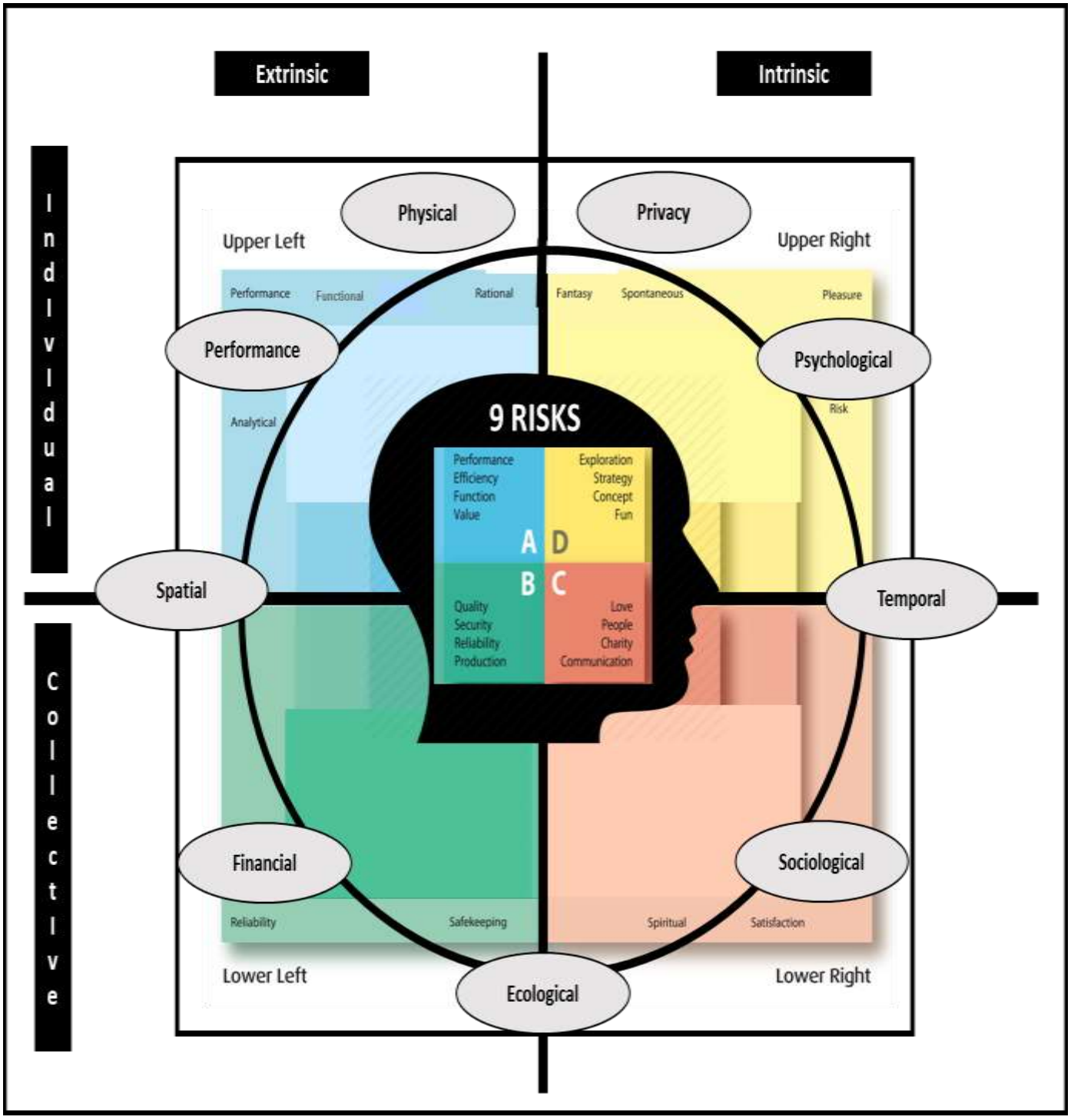
(Source: Herrmann Intl. 2000; https://heikejordan.de/artikel/TheTheoryBehindHBDI.pdf)

Overlaying the Whole Brain quadrant color scheme onto the Consumer Risks Circle yields a circular palette that aligns Brain Mode characteristics and colors with complementary Consumer Risk Angles. The resulting cognitive aura palette, the cardinal points in each quadrant for the two models correspond semantically and sentiently. This resulting color quadrant mode configuration is advanced as the Wheel of Consumer Risk Auras in Figure 7.

This enhanced Consumer Risks paradigm infuses color mood auras to both signal the Whole Brain nature of the consumer's risk "mode states," and simplify cognitive analysis for brand strategy. Consume risk analysis is converted from a more complex cognitive calculous procedure (IQ) into a more creative color-coded palette (EQ). By simply charting the pattern of Consumer Risks in each quadrant, different color auras will signal the types of brand strategy enhancements to apply. Like the varying musical tones emanating from four perfect fifths violin strings, the dominant risk aura quadrants alert brand managers to the consumers' emotional weak spots, so that brand strategy can be heuristically aimed at solutions.

Proceeding through the Wheel clockwise, the upper right gold aura quadrant portrays risks with a psychological emphasis, reflected as holistic intuitive synthesis for both planning functions and pleasurable fun. For that reason, these psychological insights are guarded through information privacy and are guided by temporal conditions (e.g., frequency, duration, pace, synchronicity) determining the presence/consciousness and progression/cycle of events. Next, the lower right red aura quadrant portrays risks with a sociological emphasis, reflected as people-oriented, interpersonal, emotional sharing, and spiritual fellowship. As a result, risk mood perceptions are guided by temporal conditions and shaped social and ecological environments. Transitioning to the lower left green aura quadrant portrays risks with a financial and material resource emphasis, reflected as reliability, security, safekeeping, and enduring quality. These financial risks are derived from ecological or material resource scarcity/abundance as well as spatial properties/privileges. Lastly, the upper left blue aura quadrant portrays a performance emphasis, reflected as functional rational actions to achieve value efficiently, and aided by task analysis. These performance risks are bounded by spatial properties/privileges and physical health/ability.

Figure 7: Wheel of Consumer Risk Auras



(Source of color quadrant descriptions: Herrmann Intl. 2000 www.hbdi.com/online-reference-and-activity-guide/a/index.html)

Brand Equity Model Pyramid of Consumer Perceptions

Keller's (24-26) Brand Equity Model (BEM) combines brand attributes with consumer beliefs/attitudes, to categorize levels of brand value perception. This model contextualizes the cognitive perceptions of consumers within a brand exposure scenario, as opposed to only capturing consumer's cognitive patterns like the CDP and Risks models. So, this study's color-coding of consumer cognition frameworks evolves from CDP brand buyer choices as a mental sequential progression, and Consumer Risks brand buyer chances as a mentally synchronized portfolio, to BEM brand buyer chakras as a mentally stratified pyramid.

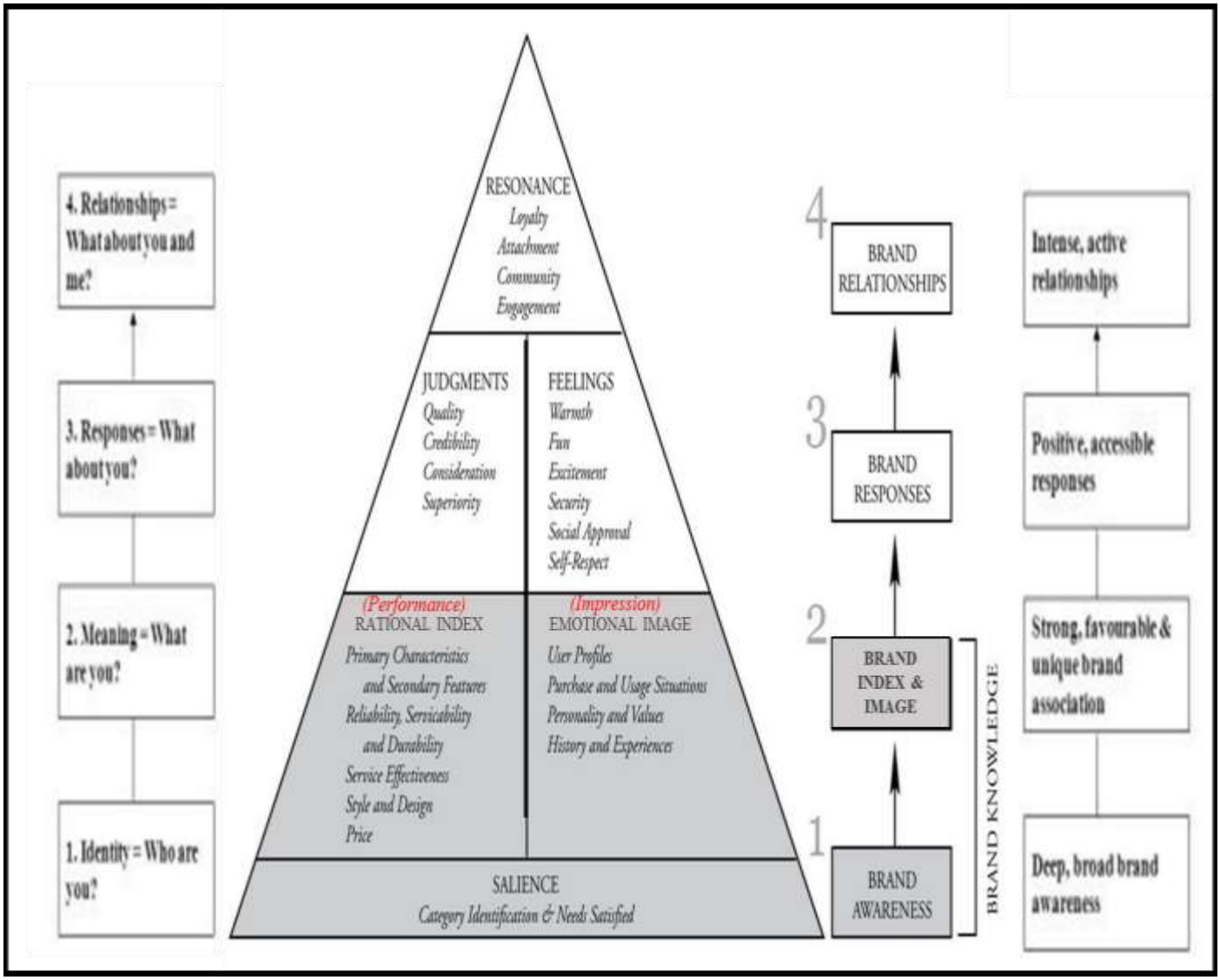
Traditionally, the BEM is used as a consumer metric to track the brand loyalty journey. Beginning with initial awareness ("salience"), through the rational ("performance, judgements") and emotional ("impression, feelings") categories associated with the AIDA concept (27), then culminating in shared customer/brand value ("resonance"). While AIDA examines the mental steps leading to behavior (attention, interest, desire, action), the BEM encompasses consumers' mental and behavioral ascent through brand awareness, identity/image, response, and relationship/loyalty. In Keller's words, the pyramid frames "brand ladder" steps that answer the core cognitive questions connecting consumers with brands.

> "These four steps represent a set of fundamental questions that customers invariably ask about brands, implicitly if not explicitly:
> Who are you? (brand identity)
> What are you? (brand meaning)
> What about you? What do I think or feel about you? (brand response)
> What about you and me? What kind of association and how much connection would I like to have with you? (brand relationships)
> There is an obvious sequence in this 'brand ladder,' that is meaning cannot be established unless identity has been created; responses cannot occur unless the right meaning has been developed; and a relationship cannot be forged unless the proper responses have been elicited." (Keller 2001)

Moreover, the "brand ladder" charts a cognitive direction and comparative duality. Each of the four questions are answered within the consumer's mind to move them along the cognitive relationship continuum from "awareness" to "resonance." Simultaneously, the pyramid categories compare the lower two levels of initial brand encounter ("identity, meaning") with the upper two levels of intimate brand engagement ("response, relationship"). By comparing extrinsic brand traits in the lower levels with the intrinsic consumer temperaments in the upper levels, consumers determine whether perceived benefits become more personalized bonds. These BEM pyramid categories in the consumer's loyalty journey are shown below in Figure 8.

Unfortunately, the logical analysis and application of BEM category measures may prevent a more balanced appraisal of consumers' cognitive symbiosis with brands. To address this limitation, a color-coding motif is proposed to harmonize the rational and emotional interpretation of brand identity, meaning, response, and relationship. The approach here is to improve brand strategy analysis and application, not to mirror the BEM's rational (left side) and emotional (right side) categories of consumer cognition and behavior. Whether the BEM pyramid categories are rational or emotional, a logical method of interpretation is commonly used. Instead, a color-coded heuristic of consumer/brand chakra stages would provide a balanced and blended method for emotional interpretation. In turn, brand strategy advantages are accrued by coupling an affective consumer mandala template with logical consumer metric techniques.

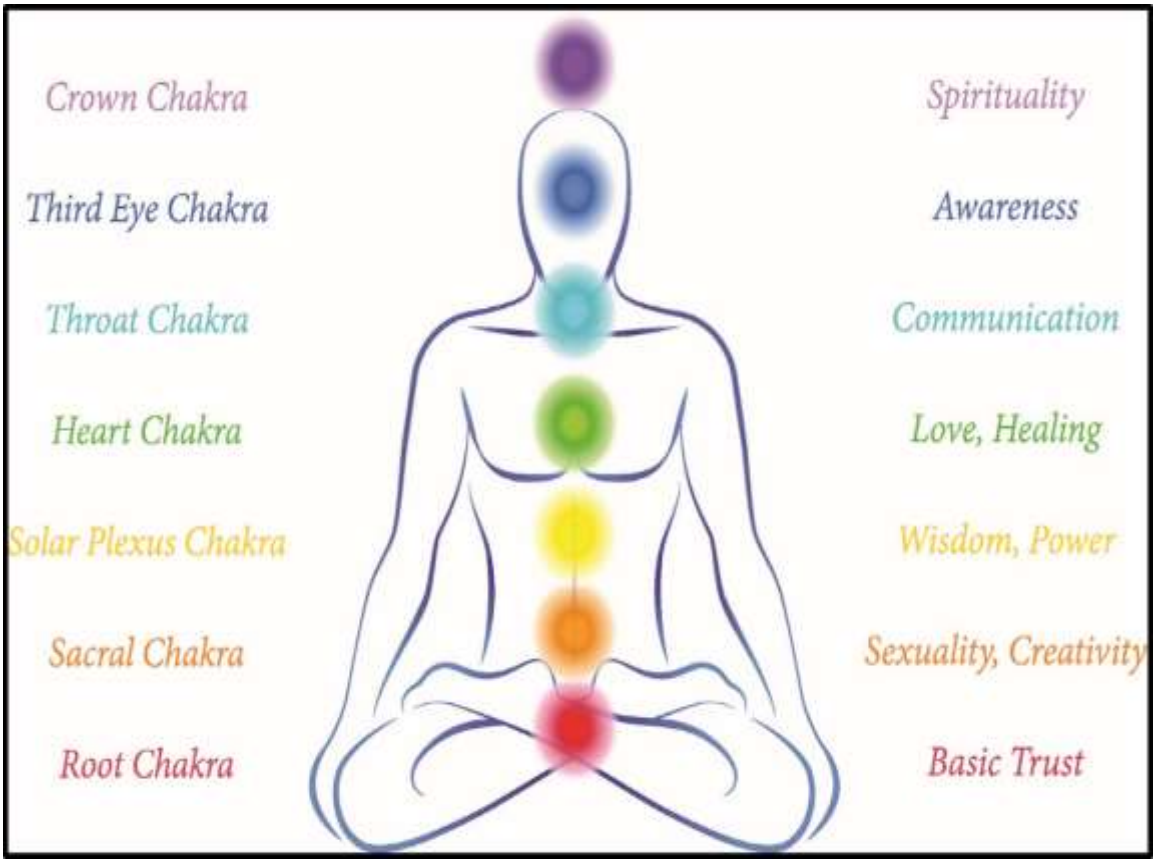
Figure 8: Keller Brand Equity Model (BEM) Pyramid



(Sources: Keller, K.L. 2001. Building customer-based brand equity: A blueprint for creating strong brands; Kaplan, M.D. 2007. Product Appearance and Brand Knowledge: An Analysis of Critical Relationships.)
Note: Red text in parentheses and "Rational Index" added to clarify the source, semantics, and symmetry of category labels

Ancient Hindu chakras within the Indian Tantra and Vedic Sanskrit beliefs (28), trace a parallel path as the cognitive ascent tracked by the BEM. From its inception in Indian antiquity, a sacred system of color auras has been aligned with the seven chakra levels. Each level of chakra system ascension represents an expansion of worldly wisdom and an elevation of inner peace, symbolized by a spectrum of colors moving from lower bright salient energy (red, orange, gold) to higher blissful sublime energy (green, blue, purple). Despite the similarity between these chakra colors and hues comprising the "Color Matrix/Wheel of Human Emotion" (13, 14) their symbolism and significance are entirely distinct. A universally accepted diagram describing the enduring chakra system of color auras is presented in Figure 9 below.

Figure 9: Chakra Auras and Attributes Chart

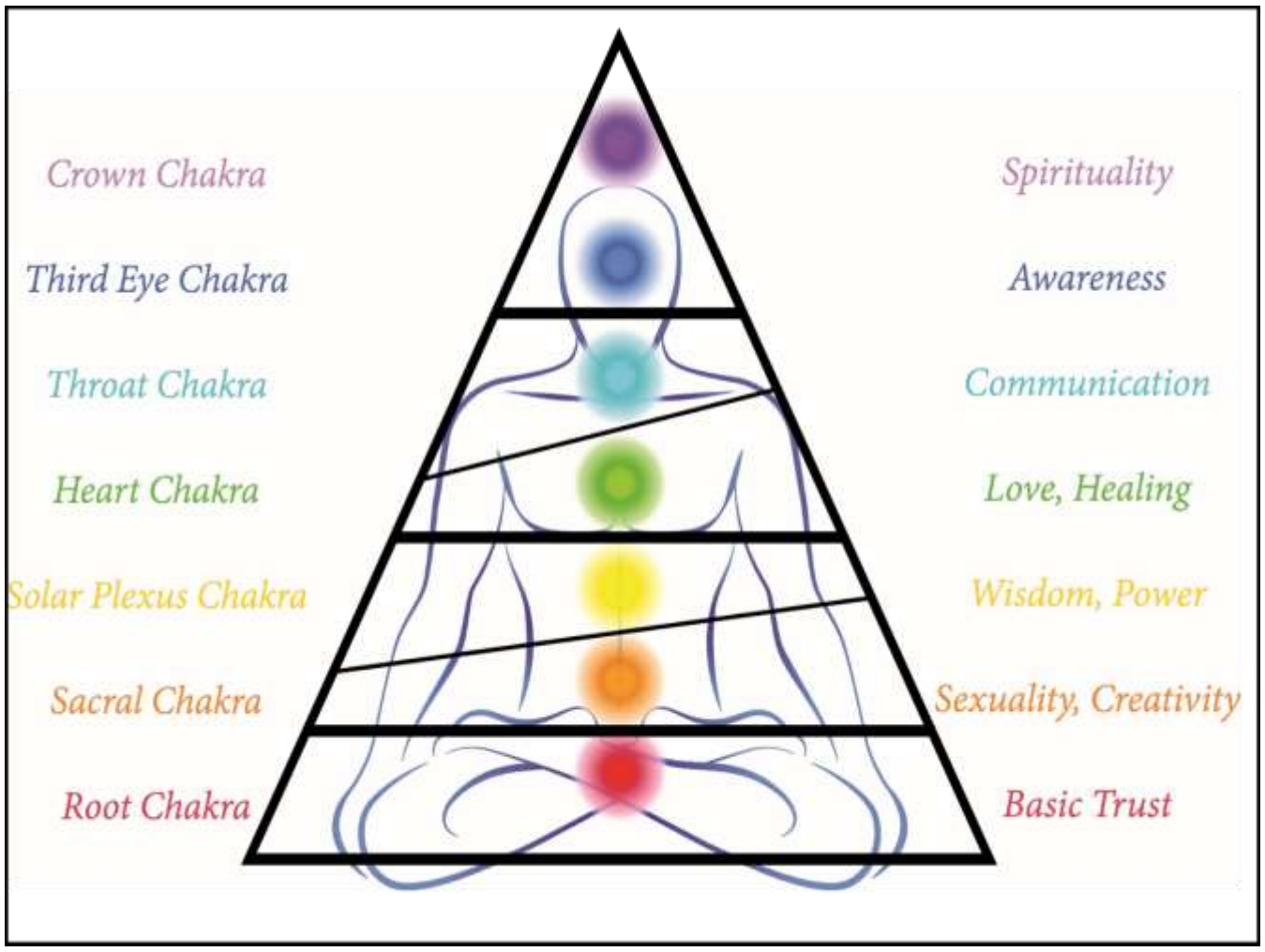


(Source: Siemasko, C. 10/15/2015. Chakra Health, Finer Minds www.finerminds.com/health-fitness/how-chakras-affect-health)

Even though the chakra system emerged from a far more distant and divinely inspired historical origin than the BEM, it shares a kindred purpose of progressing from lower to higher human consciousness. Chakras rise through a succession of community/belief spiritual growth planes, whereas the BEM pyramid inclines through a series of consumer/brand synergy growth planes. Accordingly, the chakra system's enlightened pattern of auras is directly adapted to color-code the BEM levels for emotional interpretation. Like the chakra color level energies, the BEM pyramid levels can be interpreted as emanating feelings that match the factual category descriptors. Using this color aura feeling heuristic to emotionally assess the consumer/brand relationship, brand strategists can attune their more detailed cognitive analysis in a briefer time and with balanced quality.

The resulting color-coded BEM pyramid with consumer/brand chakra auras is presented in Figure 10 below as a fusion of emotional consumer karma mandalas and logical consumer category metrics. As shown using diagonal category dividers, the "salience" stage of awareness enlists basic trust in brand identity through awareness as a root chakra. Next, the brand meaning is deciphered as a "rational indicators" and "emotional images" to build strong, favorable, and unique brand associations. This second pyramid level is analogous to the complementary blend of rational wisdom/power solar plexus chakra and emotional passion/creativity sacral chakra. Moving up to the third level, sound "judgments" and sentimental "feelings" induce positive accessible brand responses, just as throat chakra communication gives thought expression and heart chakra love/healing gives affection intentionality. At the pyramid apex "resonance" reinforces intense active brand relationships, which is similar to the renewing properties of third eye chakra awareness revealing the actualized beliefs of crown chakra spirituality.

Figure 10: Brand Equity Pyramid Color-Coded with Chakra Auras



Positioning Strategy Perceptual Maps

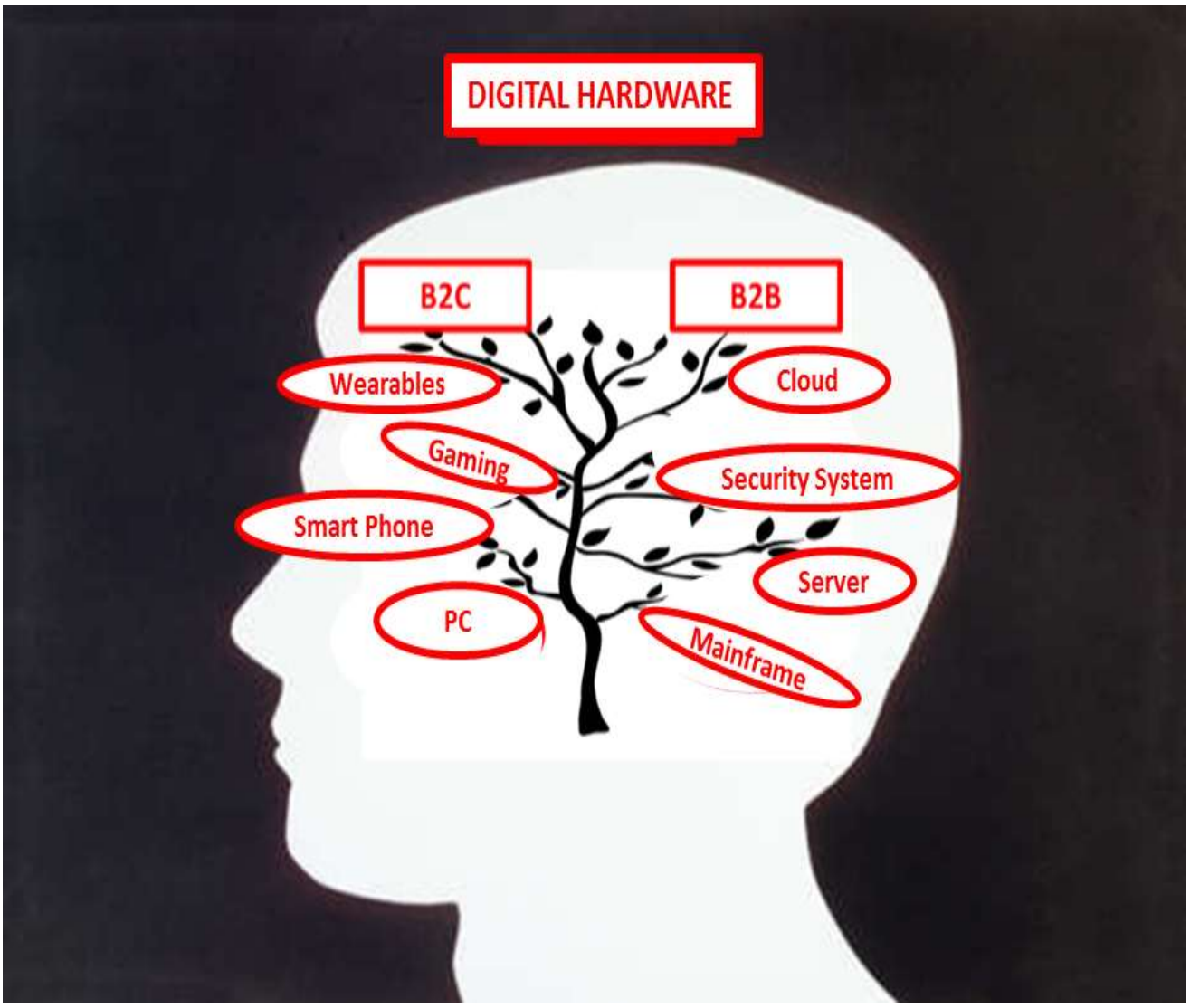
The Perceptual Map model of Positioning Strategy analysis (29) completes this study's evolution of color-coding conversion for four seminal consumer cognition frameworks. By including competing brand evaluations with accurate comparative metrics, Perceptual Maps enrich the Brand Equity Model's isolated consumer brand interaction context. So, Perceptual Maps depict brand buyer chessboards as a mental schema picture. The point pattern display on a two-axis graph shows target market consumers' comparative brand preferences for the consideration set generated by a specific need/want on – typically within the "information search" stage. Graphical displays can plot more than two attributes as multiple variable line graphs, but the two-axis window is most often identified with Perceptual Maps.

Ultimately, the strategic aim of Positioning Strategy is to differentiate a brand from its rivals in a way that is preferred by consumers (30, 31). Techniques for mapping consumer perceptions and brand associations improve the assessment of meaningful differentiation to be applied in brand strategy (32). So, although Perceptual Maps portray a competitive brand chessboard in consumers' minds, for strategists they present windows of opportunity for navigating consumer preferences.

In fact, Perceptual Map brand preference plots are the final analytical step of an empirical survey research process. By surveying a consumer sample to record their brand evaluations, the aggregated frequency means can be plotted on axes representing the top two preferred attributes. Then, brand strategists can analyze the comparative "positions" of their brand versus competitors on each axis to plan improvements. If the 'position' on a specific attribute axis cannot be improved, brand innovation may raise the comparative 'position' with new attributes.

For our purposes, inner-space Perceptual Map coordinates are charted as tree branches in the customer's memory, that are divided by market category (e.g., B2C auto styles, food types, smart phones/service, air travel, etc. & B2B commercial construction tiers, industrial materials/components, logistics services, etc.). Bottom branch fruit are older, less popular, and possibly downscale brand categories, while higher branches show newer, trendier, and upscale brand categories. This mental tree analogy enables a portfolio of brands in different categories of a larger market to be portrayed. A diagram of the consumer's mental tree is shown in Figure 11.

Figure 11: Perceptual Map as Mental Tree with Market Category Branches



Science of Perceptual Mapping

The science of Perceptual Mapping, relies on conventional IQ logic to map consumer perception (33-35), using statistical survey findings for 'brand position' measured on selected axes. This approach consists of six steps.

1st: Survey a target market consumer/customer sample on preferred consideration set brands.
2nd: Calculate mean "ratings" and "rankings" for the target market customer sample
3rd: Plot the mean brand ratings onto graphical chart axes representing 2 top attributes
4th: Label the mean rating for 'brand position' identification.
5th: Plot the "ideal" point on the chart, based on the two attribute-axes.
6th: Analyze brand patterns using five basic metrics:

a) Brand positions relative to consumer/customer "ideal" (close to far)
b) Brand position advantages/disadvantages versus competing brands (closer-to / farther-from "ideal")

Figure 12 presents the Perceptual Map result of this logical six-step methodology.

Figure 12: Logical Perceptual Mapping Science Display for Blue Jeans Brands

(Source: Adapted from Jeans'aholic Blog.11/10/2011. http://jeansaholic.blogspot.com/)

Following detailed analysis of existing brand preferences, strategic insights may reveal the potential to improve a brand's 'position' by highlighting other attributes that are not presently one of the top two preferred. This strategic opportunity, referred to as "repositioning," is projected onto a Perceptual Map with a new axis to determine whether the expected 'positioning' advantage merits launching campaign to raise the selected attribute's appeal. Using pattern recognition, these types of 'what-if' attribute/axis analysis enable brand strategists to literally turn consumer perceptions on the chosen axes.

When selecting the repositioning Perceptual Map axes, macro-marketing environment trends can provide brand attribute selection clues, instead of narrowly focusing narrowly on micro-marketing product/service attributes. This widened focus on macro market factors allows the Perceptual Map to both reveal future trends impacting customer preferences and revive current strategic brand advantages.

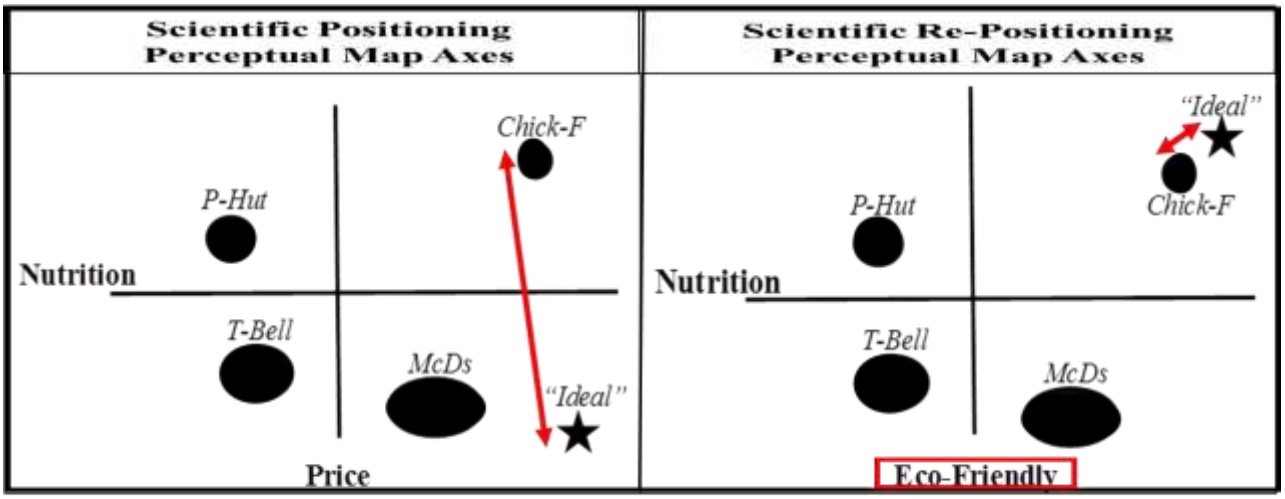
The macro-marketing environment factors are itemized by the acronym DESTEP for:

a) Demographic -- macro trend patterns not micro target profiles
b) Economic -- fiscal measures and financial markets (includes macro competition aspects)
c) Social -- cultural values and contemporary norms
d) Technological – scientific research, applied techniques, product/process innovation.
e) Ecological – weather/climate and nature conditions
f) Political – public policy and market regulation

Taking a macro view of the food/serves market category, for both B2C and B2B, discovers the eco-sustainability trend as a combination of ecological (preserve planet), social (lifestyle), economic (resource costs), political (regulation), and technological (green innovation) marketing environment trends. Using this example, strategic Brand Re-Positioning can be planned by changing attributes/axes.

The strategic advantages from raising the perceived priority of attributes for Eco-Friendly in B2C markets and Ethics in B2B markets attributes are evident. This conventional scientific approaches to Brand Re-Positioning is shown below in Perceptual Maps for the B2C market (Figure 13) and B2B market (Figure 14).

Figure 13: Brand Repositioning Perceptual Maps with Different Attribute Axis (B2C Fast Food)

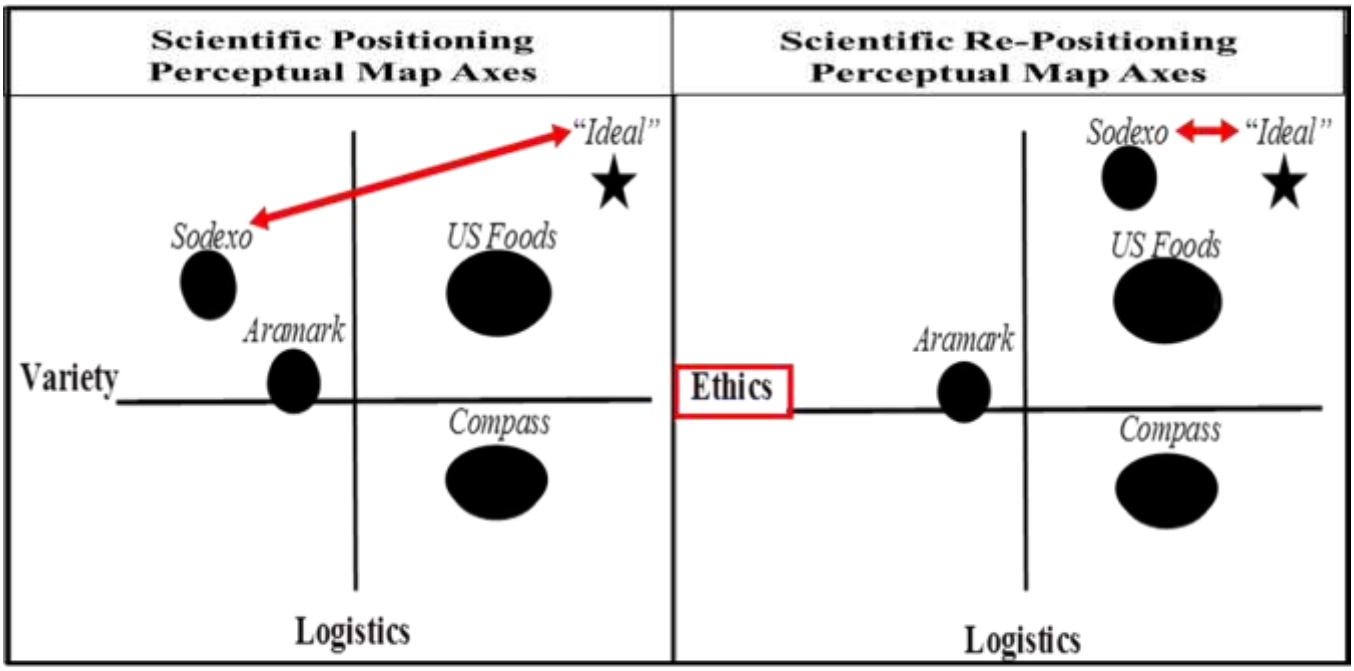


We can briefly highlight the B2C strategic advantage for Chick Filet of the "eco-friendly" Perceptual Map axis compared to the conventional "price" axis. An example of the art approach for B2C brands is shown in Figure 13. The "eco-friendly" axis, derived from ecological trends in the marketing environment, moves Chick Filet into a more strategically advantageous "brand position." The resulting 'brand position' is nearly identical to the customer's ideal, in contrast to a strategically weaker 'brand position' with the "price" axis. In reality, considerable strategic effort is required to assure "eco-friendly" promotion awareness and affirm "eco-friendly" product attributes. Still, this simple example portrays the brighter 'brand position' aura and brighter consumer choice colors that can result from a more creative approach towards selecting strategic Perceptual Map axes.

If this scenario was played out further, we could envision McDonald's attempting to make a brand strategy impression on target market consumer with their "local sourcing" from family farms. If successful, the fast-food market Perceptual Map axes could be creatively changed to "nutrition" and "local sourcing," which moves McDonalds' 'brand position' closer to the "ideal" than Chick Filet without having to rely on "price."

The B2B example of food service for organizational or factory facilities demonstrates how the new axis "ethics" provides strategic advantage for Sodexo's 'brand position' compared with the conventional axis "variety" of food menu options. Clearly, food service operations cannot sacrifice delivery "logistics" as a B2B customer attribute. However, with lower food menu "variety" than larger competitors, Sodexo draws upon the social marketing environment trend towards greater business ethics compliance and prioritizing vendors based on ethical practices. By substituting "ethics" for "variety" as a Perceptual map axis, Sodexo moves it's 'brand position' closer to the customer's "ideal." Once again, considerable strategic effort is necessary to achieve the 'brand position' of strong "ethics" in trade promotions and operation compliance. An example of this repositioning strategy using Perceptual Maps for B2B brands is shown below in Figure 14.

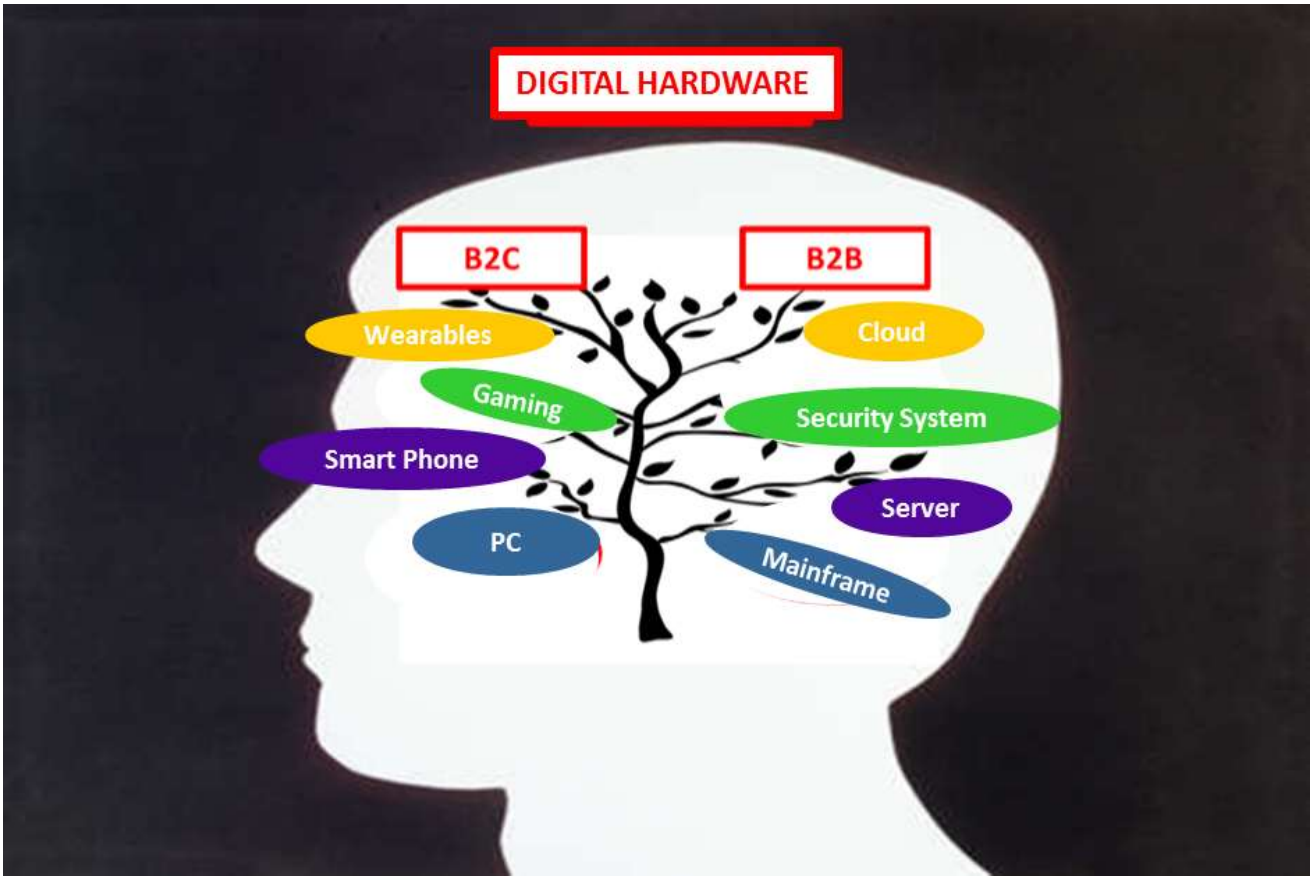
Figure 14: Brand Repositioning Perceptual Maps with Different Attribute Axis (B2B Food Service)



Art of Perceptual Mapping

As the logical Perceptual Mapping system is converted into emotional perceptual magnitude signals, the consumer's mental tree diagram can be coded with color auras. Bottom branches with often older brands give dull auras, while upper branches often bud newer brands with bright auras. These color auras allow brand managers to instinctively read an entire portfolio of market patterns to monitor a wide range of B2C and B2B opportunities. In addition, much like the strategic BCG and GE matrix, the circular size (area, diameter) of each brand category fruit indicates market share/growth. Statistical examination of each brand category can follow-up on the initial color/size attractiveness gauge. Like fruit on a tree, this color-coding and shape sizing scheme highlights the pattern of market category ripeness (size) from earlier industries on bottom with dull hues to newer markets on top with bright auras. See Figure 15 below.

Figure 15: Perceptual Map as Mental Tree with Color-Coded Market Category Auras



The artistic visualization of consumer mental trees naturally ties into the color-coding of Perceptual Maps for Brand Positioning Strategy. Marketing pioneers Al Ries and Jack Trout visualized Perceptual Maps with a creative spark. The widely shared anecdote describes a Manhattan upper east side high-rise penthouse social soiree, that Ries and Trout attended. The two advertising experts peered through an outdoor rooftop telescope at a celebrated U.S. NASA space capsule's flight orbit over New York City. As Ries and Trout observed the capsule trajectory in the telescope's crosshairs, it dawned on them that the transmission of marketing messages through media into the orbit of "inner-space" consumer minds mirrors the crosshair position map of space capsules launched into outer-space. From that nascent visual view, the analytical procedure of Perceptual Mapping brand positions based on the crosshair axes measuring consumer attribute preferences was born.

This imaginative Perceptual Map visualization of consumer cognition as "inner-space" coordinates for mapping comparative brand preferences imbues the analytical matrix for plotting statistical brand measures with an artistic muse. This study further embeds a creative guise by infusing Perceptual Maps with color-coded aesthetics to animate brand strategy analysis and application. In keeping with the "inner-space" analogy of outer-space skies, Vincent van Gogh's (36) acclaimed painting "The Starry Night" offers a homologous artistic canvas. Drawing artistic inspiration from the painting, consumer Perceptual Maps are color-coded as starry spheres in the dark mental skies of consumer cognition.

As shown in Figure 16, the renown "Starry Night" painting contains a bright full moon in the upper right corner that symbolizes the most frequent consumer "ideal" in the upper right quadrant (high/high). Similarly, the paintings starry swirls mirror the circle points that plot brand "positions," as well as creatively represent the changing brand market shares and consumer preferences. The coiled wind gale paint strokes add an aesthetic illusion of market dynamism and entangled brand rivalry. Even the consumer mental tree appears as a trunk figure with upward stretching branches. However, this tree is not symbolic in the Perceptual Map.

Figure 16: Van Gogh's The Starry Night Painting as an Aesthetic Perceptual Map Overlay

(Source: Adapted from The Starry Night, Vincent van Gogh 1889)

Color is widely used in Perceptual Mapping to distinguish brands, often graphing points with brand logos. Occasionally, the background panes forming four quadrants are shaded to contrast brand point/logo colors. Yet, the color-coding method advanced here paints panes and points as strategic indicators of brand performance. Background panes are arranged in a pastel pigment pattern from yellow upper right (ideal high/high) to orange lower right (high/low) to green upper left (low/high) to blue lower left (low/low). The axes are consistently scaled to plot high preference in the upper right quadrant. By purposely painting the quadrant panes in this manner, instinctive EQ cues can be recognized by brand strategists. The "Color Matrix/Wheel of Human Emotion" (13, 14) designates the strategic meanings of pane colors. Briefly, yellow is ecstasy/joy/serenity, orange is vigilance/anticipation/interest, green is admiration/trust/acceptance, and blue is amazement/surprise/distraction.

Painting the panes gives brand strategist an emotive sense of the perceptual relevance for each quadrant. The upper right quadrant conveys ideal customer preference with bright yellow. Then, two trade-off quadrants are scaled for intense anticipation and interest (orange) and by contrast a deeper admiration and trust (green). Even the low/low quadrant can be viable as teal blue amazement/surprise/distraction-novelty -- rather than dark blue grief, purple loathing, or red rage. Going further, additional strategic pane symbols can be painted as subtle frescos signifying primal patterns in human memory (waves, circles, crosses, arrows, triangles, etc.), much like the coiling gale wind and outward radiating moon beam and star glow circles in "The Starry Night.".

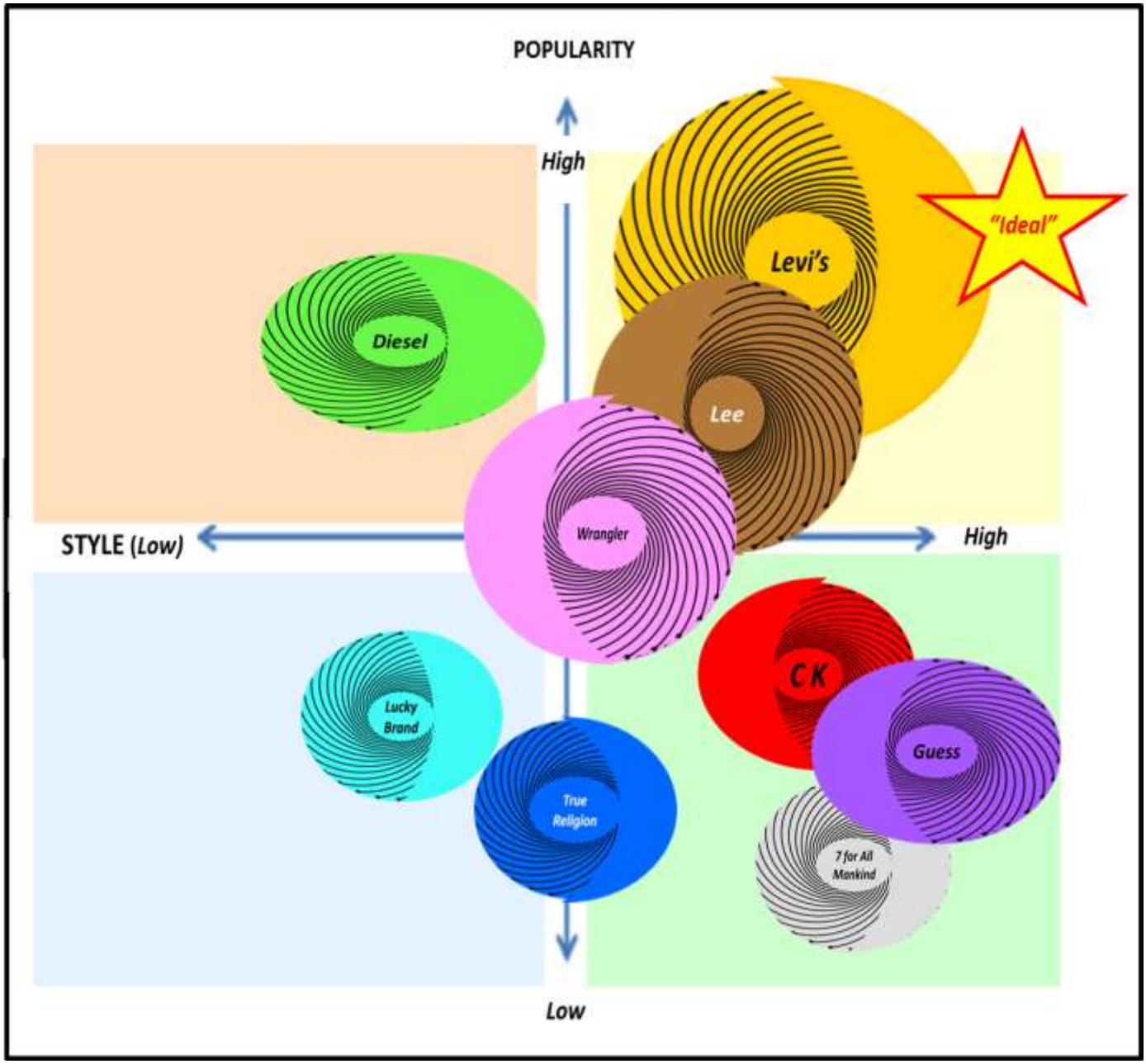
Foreground Perceptual Map points are color-coded for strategic brand position, not identification. Each brand is labeled, but the colors are not logos. Instead, van Gogh's starry swirls are used to intuitively convey brand preference position (color hue), market share (circle area) and growth (swirl direction). When the growth/swirl direction is up the right side of the star sphere is solid, and conversely when the left side of the star sphere is solid the growth/swirl direction is down. Figure 17 illustrates the color-coded Perceptual Map of blue jeans brands presented earlier as a science approach graphical display.

This artistic approach towards Perceptual Mapping paints brand positions with EQ patterns. First, both axes are renamed with synonymous jean brand attributes that are more clearly scaled towards preferred high measures. That revised framing locates a single "ideal" upper right quadrant, to maintain the pastel aura ordering of panes described above. Second, accurate brand positions are plotted with colored starry swirls indicating the relative market share (circle area) and growth (swirl direction -- up vs. down). The jean brand metrics are derived from Statistica.com (37) and Ranker.com (38). The color hues signify brand position preferences in the minds of target market consumers. In keeping with van Gogh's "The Starry Sky," a nine-position ranking is adapted from solar system color vibrations, referred to as planetary harmonics for astro-zodiac color meanings (39-44). Beginning with the sun, brand position rank/color is based on the associated planet's proximity to the sun – as listed below.

1) Gold/Yellow = Sun
2) Brown = Mercury
3) Pink = Venus
4) Green = Earth
5) Red = Mars
6) Purple = Jupiter
7) Silver/Grey = Saturn
8) Turquoise = Uranus
9) Blue = Neptune

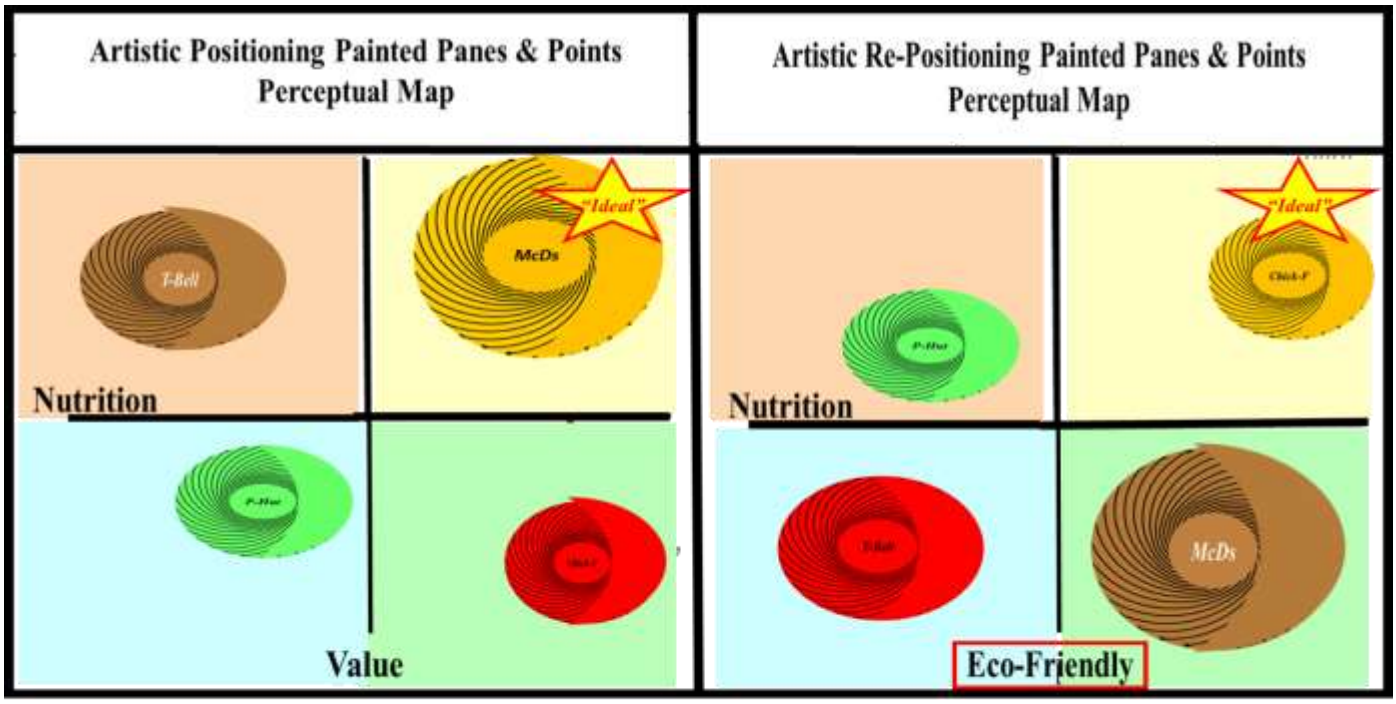
Using the brand name labels for each starry swirl, the color-coded indicators paint Levi's as the gold standard jean brand for both popularity and style. Levi's larger circle area reflects its market share dominance in a crowded brand category, and its upward swirl signals growth. Next nearest are traditional Baby Boom and working jeans brands Wrangler and Lee, both in persistent decline. As a bright spot with a foothold in the rural heartland, Diesel is fourth and growing market share with value pricing. Calvin Klein and Guess are classic designer brands battling in fifth and sixth place respectively, with declining growth. By contrast, newer brand names like 7 for All Mankind, Lucky Brand, and True Religion show rapid growth for the future in seventh through ninth place, with strong Millennial followings, despite having lower current market share.

Figure 17: Artistic Color-Coded Perceptual Map Painting Quadrant Panes and Brand Position Points



Another artistic color-code is applied to convert the B2C Re-Positioning Strategy Perceptual Maps presented earlier in the science approach discussion. Once again, the painting of panes and points embeds intuitive EQ sensing for brand strategists. Likewise, the brand position points use circle area size, swirl direction, and planet hues to signal market share, growth/decline, and preference ranking respectively. A consistent pattern for the color-coded quadrant panes is maintained by renaming the "price" axis as "value," to render the "ideal" position in the upper right quadrant. The increased strategic brand positioning intelligence that can be quickly and intuitively gleaned from color-coded Perceptual Maps is apparent in Figure 18 below.

Figure 18: Artistic Color-Coded Perceptual Map Painting Re-Position Strategy Diagrams



EQ Marketing Dashboards – Designing Color-Coded Mental Landscapes

Marketing strategy scholars converged on the idea of design of marketing dashboards to improve analytical planning and performance. Brand equity is regarded as the primary marketing asset (46), capable of being measured, managed, and messaged. As a result, the multidimensional drivers of brand equity are best managed by integrating a portfolio key performance indicators (KPIs) into a marketing dashboard information system (47). The marketing dashboard improves brand strategy with real-time graphical displays of brand performance patterns analyzed by data analytics algorithms (48). Ironically, the implicit value to brand decision makers of marketing dashboards is their visual composition of numerical calculations. Yet, most marketing dashboard literature goes through great lengths to extoll the analytical virtues and measurement validity of marketing dashboards (49), leaving the graphical displays as extraneous. Of course, color is a commonly used by data-driven marketing dashboards for variable labels and graphics legends. However, these conventional hues for logical identification are not typically color-coded for emotional interpretation. They portray still-life performance outlines instead of picturesque mental landscapes.

Accordingly, the proposed color-coding method asserts an emotional intelligence (EQ) marketing dashboard design alternative to complement the dominant cognitive/logical intelligence (IQ) model. The EQ marketing dashboard employs emotive aesthetics and artistic displays as a focal technique for infusing affective feelings into brand strategy decisions. EQ dashboards display color-coded mental landscapes to represent consumer cognition patterns, as well as to reinforce brand strategist pattern recognition ability. EQ marketing dashboards intentionally use intuitive feelings, color-coded signals, and attention-grabbing aesthetics to develop a strategic sensing competency based on emotional sensations. This artistic EQ design provides brand strategists with an initial heuristic display for instinctive guidance, which is later amplified by logical analysis.

EQ marketing dashboard color aesthetics should be synchronized and synthesized with IQ analytical metrics to for holistic brand strategy interpretation. Emotive color-coding may also engender empathy with target market consumers in brand strategy decisions. Art patrons feel connected to art painters while accountants rarely acquire ardor for auditing clients from financial statements. Graphical dashboard displays tap into emotional impulses to help prime brand strategists for reading consumers' hearts as well as their minds. This sentimental connection augments the current statistical calculus of customer-orientation (49).

Emerging marketing dashboard research takes on the IQ bias directly to posit including of EQ patterns (2, 3), by combining "hard (financial) metrics" for how brands perform in commercial markets with "soft (attitudinal) metrics" for why brands perform in consumer minds.

> "Whereas finance practice is the domain of hard, monetary performance metrics, marketing practice has traditionally been the domain of soft, attitudinal metrics. … A key question is how to integrate soft (attitude) and hard (behavior) metrics, both conceptually and in empirical models." (Hanssens and Pauwels 2016, p. 181).

In keeping with this integration of hard and soft marketing dashboard metrics, EQ designs depict consumer thoughts and feelings with colorful graphical displays, as well as encode aesthetic signals to heighten brand strategists' acuity. Emotive aesthetics provide initial color-coded cues as intuitive heuristics for attuning strategic inferences with logical analytics. EQ marketing dashboards are the practical planning application for the four color-code consumer cognition frameworks discussed above. Each framework paints a distinct mental landscape of consumer cognition with emotive aesthetic techniques. In the same way that music can elevate mathematics with equal precision, EQ consumer cognition dashboards enhance traditional IQ data-driven systems with equivalent strategic indicators. Color aesthetics, instead of data analytics, are composed and calibrated to represent brand performance patterns within the four consumer's mental landscapes (CDP, Risks, BEM Pyramid, Perceptual Maps). Thus, EQ marketing dashboards engage brand strategists in an experiential sensemaking process, with color cues to make sense of data patterns.

In addition to graphing colorful displays of IQ dashboard key performance indicators (KPIs), EQ dashboards avail key emotive interpretations (KEIs) by color-coding diagrams to speed brand strategist response and signal intuitive meanings. Given these precise and picturesque consumer cognition patterns, a kaleidoscope of strategic brand mandala patterns aptly conveys EQ marketing dashboard displays. Future EQ marketing dashboard displays of consumer cognition patterns will incorporate aesthetic signals for sound/music, visually photo-video, 3D holographs, and animated artificial life objects. These future immersive aesthetic experiences for discovering analytical insights are prefigured by the AlloSphere Research Facility at UC Santa Barbara. (50).

CONCLUSION: EQ Artistic Competency for IQ Analytics Brand Strategy

This critical examination of four seminal consumer cognition frameworks used for brand strategy analysis has introduced an artistic approach for color coding conventional visual diagrams. The research aim is to extend and enhance existing analytical techniques by including emotive aesthetic cues that portray consumer cognition patterns, as well as prime brand strategy interpretations. Beginning with the foundation of consumer cognition for brand/market choice, the Consumer (Purchase) Decision Process (CDP) was delineated as a five-stage model and color-coded using the "Color Matrix/Wheel of Human Emotions" to overlay a spectrum of hues.

Next, the Perceived Consumer Risks model was articulated with an expanded set of nine consumer risks. These conventional consumer dimensions of brand choice cost/benefit assessment were color-coded with emotional aesthetics to create a Wheel of Consumer Risk Auras. A comprehensive classification system was formulated for the nine risks wheel, comprising individual/collective, as well as extrinsic/intrinsic categories for analytical and aesthetic brand strategy sensemaking.

Then, the Brand Equity Model (BEM) Pyramid was explained as a progression through consumers' experiential journey with brands. Beginning with "salience" awareness, the BEM evolves through brand-oriented "performance" and "image" appraisals, as well as consumer-oriented "judgement" and "feeling" perceptions, to reach shared consumer/brand loyalty "resonance." These important brand strategy relationship levels were color-coded as human body chakra points to artistically align rising consumer/brand engagement with elevating chakra enlightenment auras.

The fourth consumer cognition framework examined was the Positioning Strategy model of Perceptual Maps. A discussion of conventional scientific techniques was contrasted with the proposed artistic techniques for Perceptual Mapping. The artistic approach introduced an innovative color-coded template using Vincent van Gogh's famed painting "The Starry Night," in order to compose aesthetically painted Perceptual Map quadrant panes and brand position points. This novel artistic Perceptual Mapping transformation was applied to both Positioning and Re-Positioning Strategy analysis situations.

Lastly, a practical brand strategy planning application for the four consumer cognition models was advanced as an EQ marketing dashboard system design. In contrast to the prevalent logical (IQ) dashboard's data-driven analytics for KPIs, EQ dashboards emphasize color-coded emotive aesthetics in consumer cognition displays. Emotive aesthetics also enhance brand strategists' interpretation of consumer cognition patterns with intuitive color-coded signals and meanings. EQ marketing dashboards complement and are coupled with conventional IQ data-driven designs to enable more balanced brand strategy insights.

Consequently, the critical literature examination, qualitative analysis, and artistic color-coding conversion performed by this study achieves its research aims with findings that affirm the three stated hypotheses:

a) Color-coding *accuracy* captures the intent of consumer brand cognition *array* frameworks?
b) Color-coding *aesthetics* are consistent with brand analysts' intuitive *affective* feelings?
c) Color-coding *application* techniques improve brand strategy *analysis* functions?

For marketing scholars and strategists these original research contributions avail new aesthetic layers for brand preference analysis. The discussion of each consumer cognition framework addresses these advances in detail.

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