# The impact of color traits on corporate branding 

Wei-Lun Chang* and Hsieh-Liang Lin<br>Department of Business Administration, Tamkang University, Taipei County, Taiwan.<br>Accepted 23 September, 2010


#### Abstract

Aristotle, a famous Greek philosopher, indicated that all perceptions are triggered by witness. Consumers have a first impression of sight memory for products within 0.67 seconds. The first impression dominates $67 \%$ of the purchasing process, which comes from colors. This research considers using colors to manifest corporate brand image and charm and believes that inappropriate usage of colors may confuse the corporate brand memory and image. This paper utilizes Birren's Color Theory to identify each color trait and explore the consistency between color traits of the corporate brand and the vision and goal of corporate identity. The results reveal that color also guides consumers to recognize corporate brands and, corporate brand recognition and image improves purchase and profit.


Key words: Color traits, corporate branding, corporate identity, brand identity.

## INTRODUCTION

Of the five human senses, sight undoubtedly has the most powerful effect on consumer perceptions. The famous Greek philosopher Aristotle indicated that all perceptions are triggered by witness. The research of Linstorm (2005) also revealed that $83 \%$ of human beings use sight as the receiver to obtain messages among the five senses. Gob'e (2001) considered sight the most noticeable sensing tool in humans. Human beings have a direct reaction to color and shape; hence, designers utilize color traits to enhance the sight memory of brands and improve the ability to identify brands (Perry and Wisonm, 2003). Colors are embedded with messages and can trigger special reactions between the central nervous system and the cerebral cortex. The sevensecond color theory in marketing, proposed in the 1980s in Europe, indicates that consumers experience their first impression of sight memory for products within 0.67 seconds. The first impression dominates $67 \%$ of the purchasing process which comes from colors. That is, humans memorize and recognize the color and shape of a product within seven seconds. $62 \%$ of people associate product brands via colors after watching a three-second

[^0]advertisement (Jun'ichi, 1994). Igloo Products Corporation used a color consultant to develop colored coolers and increased $15 \%$ of sales (Lane, 1991).
A research from Loyola University (2007) in the US indicated that using colors to manifest critical messages enhances attention by $82 \%$ and brand recognition by $80 \%$. Colors also create a positive image and $83 \%$ of businessmen believe that colors on a brand label result in successful business. However, Grossman and Wisenblit (1999) indicated that research on colors in the marketing field is still in the preliminary stage. This research considers using colors to manifest corporate brand image and charm. Keller and Lehmann (2006) specified potential research questions, such as brand experience and corporate image and reputation. In particular, the sense experiences (involving sensory perception) and visual effect of branding are extremely significant. The wrong use of color traits may deliver wrong messages from an enterprise perspective.

This paper utilizes Birren's (1961) color theory to identify color traits and interpret personality and emotion of colors. This study explores the consistency between corporate brand color traits and the vision and goal of corporate identity. Moreover, the present study also uses Aaker's honeycomb model to interpret consumer perception of brand identity based on color traits. Hence, this research investigates three research questions: (1) How
traits associated with colors affect consumer perception of brand identity; (2) How corporate identity utilizes traits associated with colors to deliver messages to customers, and (3) Color performance in corporate branding.

## Literature review

## Color theory

Colors are formed by light, which is also a type of energy. Scientists have investigated that people experience psychological change when they are in contact with different colors. Colors can stimulate, excite, and form different emotions (Perry and Wisonm, 2003). Each color results in various reactions (Schmitt and Simonson, 1997). Color with a long wavelength has a stimulus effect; for example, red is a vivid color. A short wavelength of color has a comfort effect; for example, blue can reduce blood pressure and pulse. Orange indicates friendliness, pink represents softness, and grey specifies professionalism (Gob'e, 2001).
In the research of human media interaction (HMI), Nijdam (2009) utilized certain color area theories to introduce color characteristics and emotions. In the first color theory, Goethe (1808) proposed the concept of a color circle that separates colors into positive and negative parts. Positive colors include yellow, orange, and red that represent conspicuous, vivid, and ambitious. Negative colors include blue and purple that represent obedient and admirable. In the research from Claudia Cortes laboratory, the concept of color meanings was proposed and indicates the specific traits of colors. Shirley Willett's color codification of emotions is the major foundation for interpreting the emotions of colors as shown in Figure 1. The outside circle includes positive traits, the second circle represents six emotions, and the inside circle indicates negative traits which presents depression. Colors symbolize abstract concepts and affect psychology and emotion. Each color has its positive and negative traits to influence human emotions. Hence, this research synthesizes certain color theories from Nijdam's study and Birren (1961) in Table 1.
Perry and Wisonm (2003) considered how personal and cultural experience affects color associations. Gob'e (2001) indicated that colors result in cultural and physical reactions. The concepts of the color circle (Goethe), the meaning of colors (Claudia Cortes), color meanings (Color Wheel), color codification (Shirley Willett), and color psychology (Birren) are different in terms of cultural experience and theoretical background. Hence, there are various definitions of color traits and emotions. However, these researches all consider that colors transmit specific traits and cause emotional reactions. This study utilizes Birren's research (color psychology) as its basis because the color psychology explanation is appropriate for interpreting color traits of corporate brands.

## Brand identity

Most consumers treat brand and corporate name as the same concept. Kapferer (1992) specified that brand has specific and individual meaning after a time-period. Aaker (1995) considered that a strong brand needs an abundant and clear brand identity. Basically, brand identity represents the external image that the organization intends to present. Upshaw (1995) considered brand identity as the synthesis of text, image, intention, and customer perception of a brand. Brand identity is determined by the perception of a receiver. Good brand identity transmits appropriate brand essentials to form a superior brand image. Perry and Wisnom (2003) specified brand identity as composed of controllable elements of a company's product or service; for instance, position, text, vision, and experience.
Schmitt (1997) specified brand identity to include the visual factor (e.g., color, type, line, and form), the hearing factor (e.g., volume), the touching factor, the tasting factor, and the smelling factor, the five senses of the brand. Brand identity provides visible value and creates company advantage. Knapp (2001) considered that the brand needs visual conversion to symbol, color, font, and style, to be efficiently and correctly delivered to consumers. Lindstrom (2005) specified that colors create obvious brand association, which is also concrete to communicate with consumers. Different colors represent different emotions and affect consumer reactions; that is, brand color relates to brand personality (Moser, 2003).
According to Knapp's research, Aaker (2004) proposed a honeycomb model to describe the elements of brand identity (Figure 2). Core value, the company's commitment to its customers and employees, should be different from that of its competitors and should create value and trigger desires. Although it is the basis for a brand's survival, core value is intangible and not always easy for people to identify. Ideal customer image drives brand traits through perceptions of similar values and beliefs between brands and customers. Emotional benefits mean that the brand causes positive responses from consumers, and functional benefits mean that the brand satisfies customer needs and solves their problems in differentiating products. Personality is a crucial element that makes brands significant and particular. Brand personality appeals to ideal consumers and builds solid relationships between brands and consumers. The base of authority refers to a competitor's inability to imitate a firm's personality and earn consumer trust through it. Finally, symbols guide people to generate images, establish brand identity, and build relationships with it. This research utilizes Aaker's honeycomb model to measure customer perception of a brand identity.

## Corporate identity

Corporate identity encompasses "visual identity," which


Figure 1. Color Codification (Shirley Willett).

Table 1.Traits and emotions of colors.

| Color | Trait |  |  | Color theory |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Color circle <br> (Goethe) | Meaning of color <br> (Claudia Cortes) | Color Meaning <br> (Color Wheel) | Color codification <br> (Shirley Willett) | Color Psychology <br> (Birren, 1961) |
|  | Positive trait | Seriousness, Dignity, <br> Grace/Charm | Active, Emotional | Passion | Enthusiasm | Passion, Love, Heat |
|  | Negative trait | X | Offensive, Embarrassed | Offensive, Courage <br> Emotionally, Intense, <br> Aggressive, Anger | Rage <br> Anger | Danger, Anger |

Table 1. Contd.

| Green | Positive trait Negative trait | Calm, Neutral X | Calm, Neutral Greedy, Sick | Good Health, Growth Disorder, Sickness, Envy | Satisfaction Hoarding | Nature, Youth, Fertility Coldness, Jealousy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Emotion | Calm | Faith, Greed | Greed | Greed | Coldness, Nature |
| Blue | Positive trait | Comfort | Faithful, Traditional | Understanding | Clarity | Peace, Calmness, Trust, Confidence |
|  | Negative trait | Void Cold | Depressed | Depression | Racing | Coolness |
|  | Emotion | Sadness | Confident, Sadness | Trust | Confusion | Depression, Coldness Calmness |
| Purple | Positive trait | Active | Leadership, Passive | Nostalgic, Romantic | Leadership | Royalty Creativity |
|  | Negative trait | Restless | Arrogant, Sorrow | Frustration | Impotence | Mystery |
|  | Emotion | Discomfort | Introspective, Melancholic | Sadness | Power | Flamboyance, Gaudiness Mystery |
| Black | Positive trait | $x$ | $x$ | Elegance | X | Modernity, Power ,Elegance |
|  | Negative trait | X | X | Death | X | Fear, Anger, Sadness, Remorse |
|  | Emotion | X | X | Power | X | Power, Style, Elegance |
| White | Positive trait | X | X | Purity, Safety | X | Purity, Peace, Innocence, Cleanliness |
|  | Negative trait | X | X | X | X | Humility Sterility |
|  | Emotion | X | X | X | X | Innocence, Cleanliness, Simplicity |



Figure 2. Honeycomb model of brand identity.


Figure 3. A conceptual model.
has traditionally been associated with organizational symbols. Melewar and Saunders (1998) indicated that corporate visual identity consists of the corporate name, logotype and/or symbol, typography, and color. Although visual identity is an important aspect of corporate identity, it is only a component of corporate identity (Melewar and Saunders, 2000). Everything an organization does, makes, and sells, and everything it says, writes down or displays, constructs its identity (Olins, 1990). According to psychology theory, people receive 70\% of their external messages from their visual sense; therefore color can be used effectively to deliver a message about the corporate identity of the enterprise
Napoles (1988) proposed corporate identity as a symbol, composed of signs, by which the company expects to be recognized. Van Riel (1995) defined corporate identity as the controllable communication of an enterprise; that is, companies combine the essences of corporate identity to communicate with internal and external stakeholders (Olins, 1990; Birkight and Stadler, 1980). Van Riel and Balmer (1997) proposed a three element combination of corporate identity, including symbol, communication, and behavior. Symbol is a type of visual representation, which provides powerful differentiation of an enterprise. Communication represents the way a company
delivers messages. Fair communication enhances competitive advantage of companies. Behavio derives from superior communication, which may result in good corporate image and reputation This research utilizes the concept of Van Riel and Balmer (1997) to interpret the delivered message from corporate brand colors and to validate identification consistency.

## Corporate branding

According to Knox and Bickerton (2003), "corporate brand is the visual, verbal, and behavioral expression of an organization's unique business model. Brand is expressed through the company's mission, core values, beliefs, communication, culture and overall design (Simoes and Dibb, 2001). King (1991) indicated that corporate brand audiences go beyond customers to include all stakeholders, and that these audiences exercise a wider range of discriminators, including both intangible and tangible product/service elements. Ind. N (1997) supported the concepts of intangibility and complexity, highlighting the variety of contact points, or interfaces, between an organization and its stakeholder audiences. Corporate branding delivers brand value, provides customer promise, furnishes differentiation for organizations with competitors, and increases loyalty.

Lawer and Knox (2004) specified corporate brand as a way to represent, manage, and communicate with corporate brand value used on a trademark. Balmer (2001) proposed five elements of corporate brand: cultural, intricate tangible, ethereal, and commitment. Knox and Bickerton (2003) also considered the goal of corporate brand and product brand is similar in creating differentiation and preference. This paper synthesized existing researches by comparing the attributes of corporate brand and product brand.

The major differences are that corporate brand (1) focuses more on internal and external stakeholders than product brand, (2) provides a more comprehensive marketing mix than product brand, and (3) communicates via enterprise rather than by marketing mix. The philosophy of corporate brand is more comprehensive than product brand. This paper investigates corporate brand as the target based on strategic thinking and long-term synergy. Hence, this research synthesizes the definition and features of corporate brand based on existing researches and consider that corporate brand conveys brand value and guarantee, differentiates among competitors, and builds good relationships among employees and stakeholders.

## RESEARCH METHOD

## The present study

This research proposes a conceptual model that enfolds customer and enterprise perspectives (Figure 3). The concept is similar to the research of Knox and Bickerton (2003), who examined corporate branding from customer and organizational perspectives. The causal path of the customer perspective is brand image, brand positioning, brand identity, corporate association, and corporate branding. The causal path of the organizational perspective is corporate image, corporate personality, corporate identity, corporate reputation, and corporate branding. The present research considered that color selection may affect what companies attempt to convey and how customers perceive. Consequently, this study considered that color traits may cause brand awareness and association based on customer perception (Perry and Widnom, 2003). The existing literature also indicates that companies create mage and reputation and convey to stakeholders through a corporate identity system (Gray and Balmer, 1998) and color is the most noticeable and common approach for communication (Lindstrom, 2005). Thus, the proposed model aims to examine if enterprises can utilize appropriate colors to convey correct brand identity and corporate identity and the impacts on corporate branding.

## Design

The research was conducted from an interpretive perspective. The current study adopted a focus group method to collect data. The focus group included well-organized discussions with selected groups of individuals to gain meaningful information (Morgan, 1988). The focus group also enables the facilitator to enter participants' realities and collect interpretations, which are crucial to understanding the impact of color traits. The benefit of the focus group method is that the researcher can obtain insights into participants' shared understanding of the topic through discussion and interaction (Kruegger, 1988).

## Sample

Six focus groups, with an average of six to eight participants each, were conducted during September to December 2009. Three groups were graduate students and three groups were office workers. The selected graduate students were familiar with brands and their logic thinking and presentation skills were superior to the undergraduate students. One of the other three groups included specialists in color cosmetics, who provided professional expertise and physical experience. The other two groups were ordinary office workers in the service industry, who are frequently in contact with people and provided similar opinions to consumers. Each group included a mix of genders and ages and the participants were aged from 21-35 years (e.g., $50 \%$ for 21-25 years, $35 \%$ for $26-30$ years, and $5 \%$ for over 36 years). The overall gender ratio was balanced (e.g., 43 and $57 \%$ for male and female respectively) among the 42 participants. The distributions of education level were $17 \%$ for under high school, $26 \%$ for university, and $57 \%$ for graduate. The occupations included service sector, medical sector, technology sector, color cosmetics sector, and educational sector. The group of color cosmetic specialists included two males and six females. The focus groups followed the guidelines from the research of Krueger and Casey (2000), including the range of participants between 4 12, facilitation by an experienced moderator, and a common discussion protocol prepared by a research team.

## Procedure

A group leader initiated and facilitated discussion in each focus group (i.e., research) and meetings lasted for an hour and a half on average. The meeting place was selected in a living room at home, a meeting room at an office, or a balcony at a coffee shop to reduce noise. Each participant had a name card on the table and a reserved seat. Two graduate students with a brand and marketing background were also assigned as assistants. At the beginning of the discussion, the leader briefly introduced the concept of this research and encouraged participants to freely share their experiences. A designed questionnaire with open questions was used to facilitate the discussion and interaction.

This study separated the discussion into two sessions. The first session investigated the color impact on brand awareness and association and how consumers perceived through color traits. This is also the logical path from color, brand identity, to corporate branding in our model. This research designed a brand new logo with eight different colors (e.g., red, orange, yellow, green, blue, purple, black, and white) to show to the participants (Figure 4). The reason for designing a new brand was to avoid the bias of existing brands and obtain brand recognition and association through colors. This concept follows the research of Luscher and Scott (1969) who believed there was a connection between color preference and objects. In this session, the research asked five open questions: (1) what are the associations of eight new brands, (2) what are the perceptions of eight new brands based on the


Figure 4. Eight different colors for a new brand.
honeycomb model? (e.g., symbol, base of authority, functional benefits, emotional benefits, ideal customer's image, personality, and core value), (3) do you think an appropriate brand color may generate a positive image (association) of the company? (4) do you think color traits represent brand personalities? and (5) do you consider brand color when selecting brands?

The second session investigated the significance of color impact on corporate identity and the benefits of color traits to convey corporate image. This is also the logical path from color, corporate identity, to corporate branding in our model. This study selected eight international brands among the top 100 brands from "Interbrand" from 2007 to 2009, including Coca-Cola (red), Hermes (orange), McDonalds (yellow), Starbucks (green), IBM (blue), ANNASUI (purple), CHANEL (white), and BURBERRY (black). In this session, the research asked three open questions: (1) what messages do brand colors convey from the corporate perspective? (2) do you think the colors on the brand symbol are important and necessary? Why? and (3) could you please identity the existing brands where color traits and brand image match? Meanwhile, does that help you to recognize that brand and increase the consumption?
After discussions in the two sessions, each group member received a nominal fee (3 U.S. dollars) and a feedback questionnaire. Returned feedback questionnaires indicated that participants felt comfortable describing their own experiences. The participants were also encouraged to express their views and exchange ideas with other members based on their perceptions.

## ANALYSES AND RESULTS

This research adopted content analysis to refine the data extracted from the discussion (Mertens, 1998). Each focus group discussion was video-recorded and transcribed verbatim. Verbatim quotes were also used to convey the exact tenor of group members' comments so data reliability would not be jeopardized (Neuendorf, 2002). The transcriptions were analyzed, as suggested by Miles and Huberman (1994). One of the authors was the primary data analyst. Initially, the researcher read the transcript to acquire a feel for the data. Next, recurring themes that related to the study's research objectives were identified to obtain the effect of color traits on corporate branding. The process was carried out on a within-case basis and then on a between-case basis.

Subsequently, data with similar themes were drawn together from different cases, and placed in the data category to further support analysis.

## Colors affect customer perception for corporate brand identity

This research utilized the honeycomb model to measure brand perception through colors, which is also the level of brand recognition from the customer perspective. First, participants from each group provided the associations of eight colors through eight designed brands. The results from the six groups reveal that the red brand triggers respondents' emotions and stimulates people to be impetuous, passionate, and energetic. The orange brand is between red and yellow and exudes happiness, optimism, and youth. Participants associate the yellow brand with brightness, joy, and warmth. The green brand presents health and nature concepts and is associated with environmentalism and peace. Participants who experience the blue brand think of intelligence, future, and hope. Participants who experience the purple brand associated it with class and glamour. Some respondents consider purple as noble and others associate it with sickness. Finally, the black brand reveals darkness, staidness and mystery and the white brand provides the traits of pureness, monotony, and kindness. Table 3 shows the associations for all colors.

Colors affect customer perception for corporate brand awareness

Symbol is the visual identity for brand recognition, identity, and association. Most participants were impressed by red and yellow colors and considered black and white as out of the ordinary. The color base of authority can trigger consumer brand awareness and shape brand image. Base of authority is difficult to imitate and connects trust and evaluation of a brand. The results also reveal that blue and black are associated with trustworthiness and red is popular among participants. Different colors elicit various feelings and the meanings on brands may be very different. In short, this research concludes that blue and black have positive evaluations of trustworthiness and red is the most popular color among participants.

## Colors affect customer perception for functional and emotional benefits of the corporate brand

Functional benefits indicate brand functions that satisfy customer needs and assist them to solve problems or accomplish specific tasks, while influencing customers to have a positive evaluation of the utility and quality of a brand. This research discovered participants have similar
associations of colors; particularly, red, yellow, green, blue, black, and white. Blue, green, black, and white cause consumers to experience the most functional benefits and may satisfy basic expectations. Emotional benefits indicate brand results in the joyful response of consumers. The results of the focus group reveal: (1) red brand causes fulfillment, (2) red and yellow convey happiness, (3) red and yellow represent values, and (4) the yellow brand is more distinctive than other colors. Red and yellow colors conform to emotional benefits and cause joyful feelings connected to happiness, hope, and passion. Conversely, red and yellow are closer to consumers compared to cool colors (such as green and blue) which may cause gaps for consumers.

## Colors affect customer perception of corporate brand recognition

Ideal customer image indicates the way a brand provides value to generate sympathy. However, consumers pursue their own ideal customer image which varies among genders or ages. For example, young male students prefer yellow and blue, and male office workers like black or gray, which is staidness. By contrast, young female students prefer cute pink and naïve white and office ladies prefer colorful red or mystery purple. The results also reveal that: (1) the traits of red and yellow brands are according to participants' image, (2) red and yellow brands are praised and appreciated by participants, (3) red and yellow brands have fine expectations, and (4) green brands are comfortable.

## Colors assist customers shaping corporate brand image and affect purchase motivation

Core value indicates the essentials and vision of brand value. Participants considered the appropriateness of using colors to convey the meaning and position of a brand. The results reveal that consumers consider colors to represent the spirit of firms and convey messages such as culture, vision, or mission. In short, brand will gradually shape its own meaning of autonomy and uniqueness, which is brand identity (Kapferer, 1992). The focus group results reveal that participants agreed that colors assist consumers in shaping brand image in the first level, affect consumer psychology and emotion and purchase motivation and judgment in the second level, and discover appropriate meanings for ideal brand image in the third level.

## Colors affect customer perception and emotion for the corporate brand traits

Colors influence human psychology and emotion. For
instance, the change of warm to cold colors results in different feelings such as summer or winter. Colors result in consumer perception and cause emotional reaction. This research utilized an informal questionnaire to assist in measuring the perception of brand personality in terms of colors. The instrument was adopted from the brand personality scale (BPS). Participants were inquired to select appropriate traits for different colors and the summary is shown in Table 4.

In the first dimension, the results reveal that most participants considered the white brand to represent down-to-earth ( $46 \%$ ) followed by the green brand (22\%). Green also conveys health ( $33 \%$ ). Meanwhile, white and green present honesty, which is $38 \%$ and $32 \%$ respectively. Participants considered red, orange, and yellow to express cheerful emotions compared to green, blue, and purple. In the second dimension, the red brand was considered a daring color ( $41 \%$ ). Red ( $22 \%$ ), orange ( $17 \%$ ), and yellow ( $31 \%$ ) mostly represented spirited feelings. Participants particularly regarded purple as imaginative and up-to-date.

In the third dimension, blue (23\%) and black (33\%) were considered the most reliable colors. Blue (22\%) and black ( $20 \%$ ) also convey intelligence that reflects on most high-tech products (e.g., computer or mobile phone). In the fourth dimension, blue, purple, and black represent an upper class (20, 20, and $23 \%$ ) color. Red ( $20 \%$ ) and purple (28\%) were considered as charming brands among participants. As for the last dimension, green was associated with outdoor traits ( $22 \%$ ) and black presents tough and powerful aspects (38\%). In short, colors enhance brand traits and brand association in terms of specific attributes.

## Colors assist customer building the relationship with the corporate brand

This research asked participants in the focus group if they considered colors in choosing a brand without considering product function and price. Based on the responses, the moderator asked participants if they choose green of the Body Shop and yellow of Burt's Bees based on the same product function and price. The participants also responded that colors represent purchase emotion and customer's first impression. The moderator also provided two examples for comparison, blue of BIOTHERM and green of the Body Shop, based on same moisture function. The participants considered blue as more appropriate to moisture than green. Other participants considered that colors help companies appeal to different customer levels. For example, Louis Vuitton attracts mature customers and Vivienne Westwood attracts young customers. Focus group results reveal that participants choose red to convey excitement and passion as well as blue to convey coolness and stability. Thus, color builds relationships between
customers and brands, attracts ideal customers, and maintains familiarity between customers and brands.

## Customers are aware of the corporate brand through color traits

Participants are aware of brands by their symbols and associate them by color traits. The focus group results reveal that participants considered that the blue of IBM provides stable and reliable products and services. The red of Coca-Cola represents excitement and passion. The red and yellow of McDonalds indicate sunshine and a vivid image. Companies typically utilize warm colors, which reflect delicious and appetizing images. This is because long wavelength colors (e.g., red, orange, and yellow) may generate a warm sensation. Conversely, short wavelength colors (e.g., purple, blue, and green) may cause a cold sensation. If companies select blue in food and drink, it will be associated with chemical products and cleansing materials. That is, blue is appropriate to the technology sector such as GE, IBM, and NOKIA. Some participants consider black and white to represent professional and specialized products, especially for cosmetics. Green has the sense of nature and is associated with trees and leaves, which conveys health and environment. This research considers color as the media to affect consumer perception. Utilizing appropriate colors not only obtains a positive evaluation and trustworthiness, but also reveals the basis of brand authority.

## Colors convey corporate identity of the corporate brand

This research investigated the significance of brand color on corporate identity (Table 2), the possibility of color traits to outline corporate image, and the benefit of color on corporate identity. This study selected eight brands among the top 100 brands from Interbrand ranking between 2007 and 2009, including Coca-Cola (red), HERMES (orange), McDonald (yellow), Starbucks (green), IBM (blue), ANNASUI (purple), BURBERRY (black), and CHANEL (white). This provided international and famous brands to participants and represented different colors. First, this research extracted the corporate identity of each brand based on open statements, which are the sources of second-hand data. The open statements of eight brands were also collected from official websites and assisted in representing corporate identity for the eight brands.
The red curve of the letter C of Coca-Cola represents energy and conveys life without burdens. The orange carriage of HERMES presents pioneer characteristics and particular traits of carry all before one. The yellow arch of McDonalds stands for delicious food and friendly services

Table 2. Difference between product brand and corporate brand.

| Characteristic | Product brand | Corporate brand |
| :--- | :--- | :--- |
| Management | Middle Manager | CEO |
| Responsibility | Middle Manager | Everyone in the firm |
| Goal | Attract customers | Obtain support from stakeholders |
| Communication | Marketing | Corporate |
| Focus | Product | Internal and external stakeholders |
| Time | Short-term (product life cycle) | Long-term (organization life cycle) |
| Value | Mainly contrived | Creator and potential culture |

Table 3. Associations of all colors.

| Color | Associations |
| :--- | :--- |
| Red | Passion, Vitality, Excitement, Boldness |
| Orange | Novelty, Happiness, Optimism, Youth |
| Yellow | Bright, Joy, Warm, Harsh to the eye |
| Green | Health, Environmentalism, Nature, Peace |
| Blue | Staidness, Intelligence, Indifference, Smooth |
| Purple | Classic, Glamour, Sickness, Sadness |
| Black | Fashion, Mystery, Staidness, Noble |
| White | Pureness, Monotony, Kindness, Honor |

Table 4. Participant perception of brand personality by colors.

| Dimension | Item | Red | Orange | Yellow | Green | Blue | Purple | Black | White |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (\%) |  |  |  |  |  |  |  |
| Sincerity | Down-to-earth | 0 | 10 | 10 | 22 | 12 | 0 | 0 | 46 |
|  | Honest | 3 | 3 | 3 | 32 | 12 | 6 | 3 | 38 |
|  | Wholesome | 2 | 14 | 12 | 33 | 16 | 2 | 12 | 7 |
|  | Cheerful | 30 | 22 | 26 | 4 | 9 | 2 | 0 | 7 |
| Excitement | Daring | 41 | 5 | 13 | 3 | 0 | 15 | 18 | 5 |
|  | Spirited | 22 | 17 | 31 | 8 | 8 | 4 | 6 | 4 |
|  | Imaginative | 10 | 10 | 5 | 5 | 12 | 26 | 22 | 10 |
|  | Up-to-date | 16 | 11 | 13 | 4 | 7 | 24 | 18 | 7 |
| Competence | Reliable | 2 | 0 | 2 | 20 | 23 | 0 | 33 | 20 |
|  | Intelligent | 15 | 5 | 8 | 15 | 22 | 0 | 20 | 15 |
|  | Successful | 24 | 8 | 5 | 5 | 16 | 0 | 27 | 15 |
| Sophistication | Upper class | 6 | 4 | 6 | 4 | 20 | 20 | 23 | 17 |
|  | Charming | 20 | 9 | 10 | 10 | 0 | 28 | 10 | 13 |
| Ruggedness | Out-of-Doors | 10 | 16 | 8 | 22 | 20 | 4 | 14 | 6 |
|  | Tough | 12 | 3 | 8 | 8 | 21 | 5 | 38 | 5 |

services. The green goddess of Starbucks conveys the concept of a mental experience. The blue letters of IBM convey reliability, availability, and security to customers. The purple image of ANNASUI conveys bewitchment at
night, adventure and lure of the journey as well as mystery and the wilds of dreamland. The black Equestrian knight of BURBERRY stands for moving forward in the spirit of an explorer. Finally, the white image
of CHANEL conveys a permanent, beautiful and unique aroma.

## Colors assist corporate brands in conveying traits to customers

Participants in this study were asked to provide their perceptions of eight selected brands through discussion. Participants considered that the red of Coca-Cola conveys stimulus, vividness, youth, impetuousness, passion, happiness, and energy. The value of Coca-Cola on corporate identity is living without burdens and encourages people to stimulate themselves, consistent with passion, stimulus, energy, and vividness. One participant considered orange the same as red in its representation of youth and energy ( 25 years old female student). Some participants regarded HERMES as courage, ego, uniqueness, differentiation, youth, and in vogue.
Most participants considered McDonalds as youthful, energetic, warm, appetitive, bright, fast, optimistic, and aggressive. Participants considered that the green of STARBUCKS conveys quiet, leisure, youth, staidness, and comfort. Furthermore, certain participants perceive IBM as reliable, staid, professional, cool, novel, and trustworthy. The existing customer perception is identical to what IBM attempts to deliver: reliability, availability, and security. Participants recognized ANNASUI as mysterious, elegant, noble, gorgeous, and charming and considered that only using black letters of the corporate brand cannot convey mystery. One participant though purple conveys morbidity ( 25 years old female student). Participants also identify BURBERRY as noble, mysterious, good looking, bad and cool. That is, bad stands for the spirit of fearlessness for an explorer and nobility, mystery, and cool represent personal achievement. Participants considered CHANEL as special, mysterious, elegant, classic, clean, and honorable. The existing customer perception reveals that CHANEL conveys elegance and extraordinary style.

## Colors on the brand symbol convey appropriate message, image, and spirit of the corporate brand

Most participants agreed on the significance of colors on a brand symbol and considered that they convey an appropriate message, image, and spirit of the corporate brand. Some participants considered various degrees of importance for colors on a brand symbol, depending on different preferences. Conversely, many companies have undertaken a color revolution and attempted to change color to transform to a new image. Participants agreed that the acceptance of new color will be low after a short time period due to the past image. However, most participants indicated that cultural difference is the most important factor for companies. Participants recalled that

McDonalds in Israel changed their color to ensure that the burger and French fries conformed to the Judaism discipline. The background color was changed from red to blue to represent the sky, which is also the flag color of Israel. This research agrees concerning the significance of color on brand symbol. Enterprises must consider if the traits and emotions of colors are consistent with the spirit of the company.

## Marketing implication

This research utilizes the method from research of Romaniuk and Sharp (2000) to discover the owned attributes for each brand color. The concept is to reduce usage bias of data by identifying a second pattern in image responses. The problem of usage bias is that brands with more users tend to score higher on image responses. This study aims to transform collected data from focus group into invisible patterns and distinguish owned attribute for each brand color. First, this research counts the total number of traits (attributes) for each color and presents in order. That is, out-of-doors occurs frequently with 50 times. As the usage effect is reflected in the number of responses for each color, the concept of chi-square can be utilized to estimate the expected number of responses in each cell. The following formula is used to calculate the expected values.

Expected $=\frac{\text { Row total } \mathrm{x} \text { Column total }}{\text { Total for all cells }}$
Next, this study identifies the deviations from expected by simply subtracting the expected from the actual proportion of responses. The deviations are shown in Table 5. Conversely, this method clearly reveals where a brand scores lower and higher than expected value, which is the major advantage over correspondence analysis in perceptual map. The deviations reveal significant information: (1) the positioning of each brand color and (2) which attributes are owned by particular brand colors and to what extent.
This research identifies that each of the brand colors has attributes upon which they score more or less than expected by examining the deviations. This study also highlights attributes with major positive and negative deviations for each individual brand color. For example, red is daring reliable is inappropriate to warm colors (red, orange, and yellow) and down-to-earth is improper to cold colors (purple and black). The information also provides marketing managers an indication of how brand color is performing on specific traits and how to avoid the mismatch of perception. Furthermore, the influence of negative deviations is also significant. This study singles out owned traits when a brand color has a positive deviation that is more than $50 \%$ of the largest negative deviation. The results in Table 6 also indicate which trait

Table 5. Table showing deviations from expected.

|  | Brand Color |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Traits | Red | Orange | Yellow | Green | Blue | Purple | Black | White |
| Out-of-Doors | -1.42857 | 3.238095 | -1.39683 | 4.412698 | 3.253968 | -2.7619 | -1.33333 | -3.98413 |
| Spirited | 3.828571 | 3.428571 | 9.819048 | -2.32381 | -2.47619 | -2.57143 | -5 | -4.70476 |
| Reliable | -5.17143 | -4.57143 | -4.18095 | 3.67619 | 4.52381 | -4.57143 | 8 | 2.295238 |
| Upper class | -3.04286 | -2.47619 | -2.07302 | -4.19206 | 2.65873 | 4.52381 | 3.166667 | 1.434921 |
| Charming | 3.085714 | -0.38095 | 0.034921 | -2.06032 | -6.20635 | 8.619048 | -2.66667 | -0.4254 |
| Wholesome | -4.4 | 2 | 0.466667 | 8.466667 | 1.333333 | -3 | -2 | -2.86667 |
| Up-to-date | 1.6 | 1 | -1.53333 | -3.53333 | -2.66667 | 7 | 1 | -2.86667 |
| Down-to-earth | -5.27143 | 0.095238 | -0.4254 | 3.598413 | -0.53175 | -3.90476 | -6.83333 | 13.27302 |
| Imaginative | -1.27143 | 0.095238 | -2.4254 | -3.40159 | -0.53175 | 7.095238 | 2.166667 | -1.72698 |
| Intelligent | 0.857143 | -1.80952 | -1.31746 | 0.730159 | 3.603175 | -3.80952 | 1.333333 | 0.412698 |
| Daring | 10.98571 | -1.71429 | 0.790476 | -4.1381 | -5.2619 | 2.285714 | 0.5 | -3.44762 |
| Tough | -0.01429 | -2.71429 | -1.20952 | -2.1381 | 2.738095 | -1.71429 | 8.5 | -3.44762 |
| Successful | 4.242857 | -0.52381 | -1.99365 | -2.8746 | 1.007937 | -3.52381 | 3.833333 | -0.16825 |
| Cheerful | -0.62857 | 6.571429 | 8.114286 | -2.74286 | -0.85714 | -2.42857 | -6 | -2.02857 |
| Honest | -3.37143 | -2.2381 | -2.66984 | 6.520635 | -0.5873 | -1.2381 | -4.66667 | 8.250794 |

Table 6. Owned traits of each brand color.

| Traits | $\mathbf{5 0 \%}$ of largest negative deviation | Brand Color |
| :--- | :---: | :---: |
| Spirited | -2.5 | Yellow $(+9.8)$ |
| Reliable | -2.6 | Black (+8) |
| Charming | -3.1 | Purple $(+8.6)$ |
| Wholesome | -2.2 | Green $(+8.5)$ |
| Imaginative | -1.8 | Purple $(+7)$ |
| Down-to-earth | -3.4 | White $(+13.2)$ |
| Daring | -2.6 | Red $(+11)$ |
| Tough | -1.7 | Black $(+8.5)$ |
| Cheerful | -3 | Yellow $(+8.1)$ and Orange $(+6.6)$ |
| Honest | -2.3 | White $(+8.3)$ and Green $(+6.5)$ |

belongs to a particular brand color; for instance, charming and imaginative are more appropriate to color purple than others. Marketing managers can choose major and minor colors of a corporate brand based on the mission and vision. Additionally, the results also reveal the identified free traits, which are out-of-doors, upper class, intelligent, and successful. These traits may represent opportunities to add to the image of a brand color as minor effect.

In summary, the estimated deviations can help manager to identify brand traits and position based on what traits that a corporate attempts to convey. For instance, red owns trait of daring and is appropriate to companies which may convey fashionable and encouraging perception. Yellow is expected to represent a cheerful brand. Black is reliable and tough which may convey dependable and solidness of a corporate brand. White constantly represents sincerity and pure of a corporate brand. Consequently, the owned and free traits provide significant information and clues to managers for
choosing appropriate corporate color.

## Conclusion

Color is important in the process of building a brand and obvious as the first communication. Companies use brand to create an experience and association and color allows consumers to identify corporate identity clearly. This research proposes a conceptual model to investigate relationships among color, brand identity, corporate identity, and corporate branding. The current study conducted a focus group to obtain in-depth viewpoints of customer perception. This work utilized the honeycomb model to link color, brand identity, and corporate branding, to identify brand trait, customer/brand relationship, and corporate image. In linking color, corporate identity, and corporate branding, the present study utilized symbol, communication, and behavior to recognize visual
symbols, communication, and corporate vision. Finally, this research verified the consistence among brand trait/symbol, customer/brand relationship/communication, and corporate image/corporate vision from enterprise and customer perspectives.
The results reveal that color affects consumer perception for brand identity and corporate identity. Consumers select their preferred colors, which may convey similar value to their perceptions. That is, the effect of color generates related emotions which build the relationship between consumer and brand. The produced emotions also attract ideal consumers, connect the consumer to the brand, and shape corporate image. The results also show that color traits deliver corporate identity which enfolds corporate brand messages. Successfully using color to convey corporate identity enhances consumer purchase behavior. This is because color traits affect emotions and positive consumer evaluation of corporate identity. Colors also increase consumer awareness of the spirit of companies and increase recognition and purchase intention.
In short, consumers visualize and sense color traits that influence their perceptions, which may reflect similar values on the corporate brand. Corporate identity is a channel for people to receive messages from companies. Appropriate color traits and influence attract target customers to increase favorable impressions. Color also guides consumers to recognize corporate brands. Conversely, companies also use colors to convey correct spirits and visions as well as enhance positive corporate image. Finally, this research has certain limitations for further investigation. This research investigates the influence of colors on corporate brand, which may limit specific extreme colors in brightness. The impact of other colors still needs to be explored in detail. Moreover, this paper only focuses on eight colors and five of eight are the mixture of three primary colors: red, yellow, and blue. The color impact of the three primary colors can be further investigated to discover the significance of these colors compared to other colors.

## REFERENCES

Aaker DA (2004). Leveraging the corporate brand. Calif Manage Rev. 41(3): 102-124.
Aaker DA (1995). Building Strong Brands. Big Apple Tuttle-Mori.
Balmer JMT (1997). Corporate Identity: Past, present and future. University of Strathclyde working paper series.
Balmer JMT (2001). Corporate identity, corporate branding and corporate marketing seeing through the fog. Eur J Mark., 35(3/4): 248-291.
Birkight K., Stadler MM (1980). Corporate Identity. Grundlagen, Funktionen, Fallspielen, Verlag Moderne Indeutris, Landsberg an
Birren F (1961). Color Psychology and Color Therapy, University Books, Inc. New Hyde Park. N.Y.
Claudia Cortes meaning of Colors, http://www.mariaclaudiacortes.com
Color in the office: It makes business sense, Xerox, available at: http://www.office.xerox.com
Gob'e M (2001). Emotional Branding: The New Paradigm for connecting Brands to People. Allworth Press.

Gray ER, Balmer JMT (1998). Managing Corporate Image and Corporate Reputation. Long Range Plann. 31(5): 695-702.
Grossman RP, Wisenblit JZ (1999). What we know about consumers' color choices. J Market Prac: App Mark. Sci., 5(3): 78-88.
Huberman AM, Miles MB (1994). Data management and analysis methods. Handbook of Qualitative Research. Sage Publications, Thousand Oaks. CA. 428-444.
Ind N. (1997). The Corporate Brand. Macmillan. Oxford.
Kapferer J.N. (1992). Strategic brand management: new approaches to creating and evaluating brand equity. Kogan Page.
Keller KL, Lehmann DR (2006). Brands and Branding: Research Findings and Future Priorities. Mark. Sci., 25(6): 740-759.
King S. (1991). Brand Building in the 1990s. J Mark. Manage. (7): 3-13.
Knapp DE (2001). The Brand Mindset. McGraw-Hill Companies. Inc.
Knox S., Bickerton D (2003). The Six Conventions of Corporate Branding. Eur. J Mark., 37(7-8): 998-1016.
Krueger RA (1988). Focus Group-A Practice Guide for Applied Research. Sage Publication. Inc: London
Krueger RA, Casey, M.A. (2000). Focus Groups: A Practical Guide For Applied Research. Third Edition. Sage.
Lane R (1991). Does orange mean cheap?. Forbes 148: 144-147.
Lawer C, Knox S (2004). Reverse-market orientation and corporate brand development. Working series. Cranfield University School of Management Lech.
Lindstrom M (2005). Brand Sense: Build Powerful Brands through Touch, Taste, Smell, Sight, and Sound. Free Press. A Division of Simon and Schuster Inc. New York. NY.
Luscher M., Scott I. (1969). The Luscher Color Test. Random House. New York. NY.
Melewar TC, Saunders J (1998). Global corporate visual identity systems standardization, control and benefits. Int. Mark. Rev., 15(4): 291-308.
Melewar TC, Saunders J (2000). Global Corporate Visual Identity Systems: Using an Extended Marketing Mix. Eur. J Mark., 34(5/6): 538-550.
Mertenes DM (1998) Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches, Sage Thousand Oaks CA.
Miles MB, Huberman AM (1994). Qualitative data analysis: an expanded sourcebook (2ed). Thousand Oaks Sage Publications.
Morgan D. L. (1988). Focus Group as Qualitative Research Sage: London.
Moser M (2003). United We Brand: How to Create a Cohesive Brand that's Seen, Client Distribution Services.
Napoles V (1988). Corporate Identity Design, New York: Van Nostrand Reinhold.
Neuendorf KA (2002). The Content Analysis Guidebook Sage Thousand Oaks CA.
Nomura J (1994). Secret Pink, Nihon Eizo Shuppan Co. Ltd.
Olins W (1990). Marketing Guide No. 15: Corporate Identity. Marketing pp. 21-24.
Perry A., Wisonm D. (2003). Before the Brand: Creating the Unique DNA of an enduring Brand Identity. McGraw-Hill.
Romaniuk J, Sharp B (2000). Using known patterns in image data to determine brand positioning. Int J Mark. Res. 42(2): 219-230.
Schmittm B., Simonson A. (1997). Marketing Aesthetics. Free Press.
Shirley Willet Color Codification, http://home.earthlink.net/~smwillett/colorofemotions.html
Simoes, C., Dibb, S (2001). Rethinking the brand concept: new brand orientation. Corporate Communications: an int. J., 6(4): 217-224.
Upshaw LB (1995). Creating brand identity: the strategy for success in a cluttered and confused marketplace. John Wiley and Sons.
van Riel (1995). Principles of Corporate Communication. HK: PrenticeHall Hemel Hempstead.
van Riel, Cees BM, Balmer JMT (1997). Corporate Identity: the Concept, its Measurement and Management. Eur. J Mark., 31(5/6): 340-554.


[^0]:    *Corresponding author. E-mail: wlchang@mail.tku.edu.tw. Tel: 886-2-26215656 ext. 3148.

