Intangible Design Factors in New Product Development: The Value of Net Emotional Effect

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1.0 Introduction

In today's marketplace, consumers are presented with an often astounding number of choices when selecting even the most mundane of products. Product variety is commonplace, especially in competitive mature sectors where manufacturers are constantly looking for innovative ways to form a connection with consumers. This connection, however, is not always only based on which product actually best satisfies customer needs, has the best quality/technology, or represents the best economic value. Product preferences are often largely based on intangible factors tied to emotion, knowledge, and experience.

Take for instance, an example offered by Theodore (1981) in which a mundane product – housing insulation – is used as an example of how intangible factors play into the purchase decision, resulting in higher perceived value to the consumer. One insulation installer shows up and does a quick walk-around of a customer's home, and then scribbles out an estimate on the back of an envelope. A second installer takes detailed measurements, factors in local climate data, asks a series of questions, and then enters all of the details into a software application running on a laptop, prints a detailed personal estimate to a printer in his tidy white truck and gives the customer an estimate which is a few hundred dollars more. It's easy to guess that the second contract was probably taken by the customer. In this example, the second contractor has taken intangible factors associated with the product (knowledge, expertise, experience) and given them tangible attributes (a detailed, personalized, printed estimate), possibly resulting in added value to the consumer.

Today, simply having the best technology or product is not enough to win consumer hearts and minds. Perhaps one of the best examples of this is the Toyota Prius (and other hybrid vehicles). The Prius in particular has been a best-selling hybrid because of its higher mileage, and this makes the owner feel good about emitting fewer harmful greenhouse gases into the atmosphere. The base-model Prius has an MSRP of $22,000 and achieves an average fuel economy of 47 miles per gallon. The non-hybrid Honda Civic has an entry price of $15,305 and achieves 29 miles per gallon. Assuming gas at $3.00 per gallon and 12,000 miles of driving per year, it would take over 14 years to recoup the Prius price premium in gas savings. Given that both Honda and Toyota are widely recognized for building quality, reliable cars, it's evident that Prius sales are driven to a significant degree by emotional forces including a desire to help the environment and to enjoy the image factor exuded by this car.

Understanding intangible design factors is critical in the development stage of new products and services. While it's obviously critical to consider the literal needs of the consumer, engineers and product managers must also dive into the psychology surrounding their product in the marketplace. They must attempt to understand how current and future intangible influences might drive the success or failure of their products. The paper begins with a review of the current literature in order to define the importance of intangibles as a part of the customer value, the different dimensions of intangibles and the dynamics between them. In the next step a model is developed based on the theory of planned behavior to describe how the intangible dimensions influence our behavior as a customer. In the next step design cues are developed which can help designers to incorporate intangible dimensions into the product and thus increase the overall value for the customer. Furthermore, a matrix is suggested which describes the correlation between design cues and the intangible dimensions. This will help designers to understand the specific design cues that will create value in particular intangible dimensions and thus increase customer's value. Finally, the emotional signature is introduced. This framework provides a metric to measure the impact of the net emotional effect on customer value and loyalty. These concepts are then applied in cases which show how design

cues were integrated into the design of the products and how these design cues might have influenced the success of the product.

2.0 Literature Review

2.1 Definition of Intangible

Intangibility can be described as something that cannot be touched. The properties that it exhibits are that it is not of physical matter but rather abstract and complex (Steiner & Harmon, 2009). From an accounting perspective, tangible and intangible assets can increase the overall value of a company. Tangible assets such as property, plant & equipment are economic resources that contribute to the value of the company (Stickney, Weil, & Schipper, 2009). Goodwill is the intangible asset accounted for in a company's balance sheet. Intangibles such as patents or brand names which are acquired in market exchanges are acknowledged to increase the value of the firm. The current accounting theory does not, however, account for the benefits arising from internally developed intangibles (Stickney et al., 2009). Intangible is something valuable which a company has, which is not material, such as a good reputation. Harmon & Steiner (2009) defines the following intangible asset categories:

- Human capital: knowledge and skills each employee contributes to a company.
- Information capital: accumulated knowledge of a company stored in information systems and networks.
- Organizational capital: value that derives from a company's organizational structure, culture and leadership.

As with tangible assets, these intangibles are economic resources owned by the company. The interconnection between tangible and intangible assets increases the company's value. This concept can be transferred to customers. In this context a customer's value is comprised of the tangible assets in the form of products and/or services and the intangible assets. There is a common understanding that similar to a company's intangible values, the intangible asset for a customer has a knowledge dimension (Steiner & Harmon, 2009). However, since customers also place value on things surrounding them based on the positive experience and emotions they had, these dimensions have an influence on the overall customer's value as well. Customers want to live positive consumption experiences. According to Gentile, Spiller, & Noci (2007) it is important for companies to deliver an adequate balance between the functional and the experiential value. The total customer value thus is some combination of tangibles and intangible assets. The intangible elements can create a unique brand identity and value for each customer, which can help companies to differentiate and create a strong customer relationship (Steiner & Harmon, 2009). Once such a relationship is created, competitors would have difficulties to imitate intangible assets. Thus, intangible value of a product can create sustainable competitive advantage to companies.

2.2 Individual Intangible Dimensions

Based on the literature review, a taxonomy of the three possible dimensions of intangibles was created (Appendix A). The taxonomy introduces subcategories for each of the three dimensions which are currently considered to be knowledge, experience and emotion (Steiner & Harmon, 2009).

2.2.1 Experience

Human beings are concerned with achieving pleasurable experiences (B. Schmitt, 1999). According to Verhoef et al (2009) a customer experience "originates from a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction. This experience is strictly personal and implies the customer's involvement at different levels (rational, emotional, sensorial, physical, and spiritual)". The intangible dimension of experience plays an important role in each possible stage of a customer's interaction with the product or service. Customer experience is a holistic construct and is therefore not limited to the purchasing or usage situation, but includes the search, purchase, consumption, and after-sales phases of the experience (Verhoef et al., 2009). It is important to recognize within the customer experience creation process that multiple possibly independent contact points exist (Verhoef et al., 2009).

In existing literature, customer experience is described as a multidimensional structure. These dimensions relate to sensory, affective, creative cognitive, physical, lifestyle and social identity experiences (Schmitt, 1999; Verhoef et al., 2009; (Gentile et al., 2007). Some of them are strictly personal experiences, while one of them comprises the experience of and with others (Gentile et al., 2007; Steiner & Harmon, 2009). The sense dimension refers to creating positive customer experiences through the incorporation of sight, sound, touch, taste and smell (Schmitt, 1999). Addressing the sensorial component can increase the pleasure, excitement and sense of beauty (Gentile et al., 2007). The affective dimension addresses the customers' emotions. In this context it is important to understand what triggers the customer emotion and how to elevate the level of positive emotions with the product (Schmitt, 1999). In the third dimension the focus is on creating a cognitive, problem-solving experience. The customer is engaged creatively through surprise, intrigue and provocation. Enhancing the physical experience means showing customers new and probably more convenient ways of doing things. The concept of usability is important in this context. The lifestyle component addresses the system of values and the beliefs of a person. Enabling an alternative lifestyle according to these values or beliefs can create a positive, motivational experience.

Finally, the social identity creation relates to the interaction the customer has with other people and can comprise any of the other dimensions. The interaction with other people can influence the individual experience amongst others as a process where the customer enhances his experience through being able to create a certain self-image or status in relation to others (Steiner & Harmon, 2009). The product might be meant to create a sense of belonging or even distinction from a social group (Gentile et al., 2007). The customer creates a positive experience through being able to be perceived positively by others. Another aspect is the social network which has a strong impact (Steiner & Harmon, 2009). Through the purchase or use of a product that expresses their common value and interest, people experience the product in a positive way. The product gives them the chance to be part of the social network. Forms of such social networks are brand communities which are established by customers of a certain brand to share their experience (Steiner & Harmon, 2009). Through these communities, customers can enhance their own product experiences or the experience as a group. The creation of relationships with customers can therefore become an important aspect for the company (Verhoef et al., 2009). Taking into consideration all the subcategories of the customer experience, the interaction between a customer and a product or service, becomes a holistic experience that takes into consideration not only the rational, but also the emotional drivers for a customer (B. Schmitt, 1999).

If a company is capable of designing its product or service to enable a customer experience from which positive emotions arise, it can create loyalty (Steiner & Harmon, 2009). The customer's assessment will depend on the comparison between their expectations and the result of their interaction with the company's offering (Gentile et al., 2007). The objective is to enable the customer to experience the relationship with a company in an excellent way at any point in time, thereby increasing the total customer value for the company as well. The value is enhanced through the co-creation of a customer's own unique experience with the company (Gentile et al., 2007). Increasing the customer experience can therefore be a source for a strong customer-brand-relationship (Steiner & Harmon, 2009).

2.2.2 Emotion

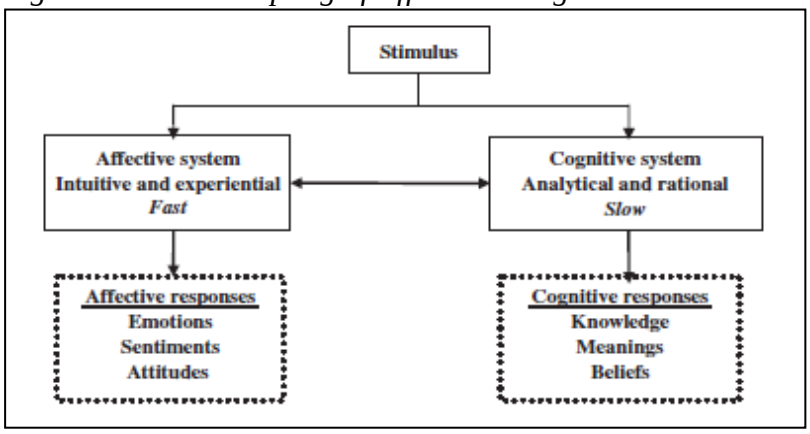
Why Are Emotions Important

Among the intangible dimensions, emotions are the most difficult to understand. Emotions derive their significance from the fact that they can incite customers to select a particular artifact from a row of similar products, and will therefore have a considerable influence on our purchase decisions. As a consequence, more and more producers currently challenge designers to manipulate the emotional impact of their designs, or, to "design for emotion". However, emotions – being intangible – are hard to predict and design for due to a number of reasons. First, the concept of emotions is broad and indefinite, i.e. products can evoke many different kinds of emotions. Second, emotions are personal, that is, individuals differ with respect to their emotional responses to a given product. The same product can trigger a positive emotion in one person, while eliciting a negative emotion in another. Third, products often evoke "compound emotions". Rather than eliciting one single emotion, products can elicit multiple emotions simultaneously. So when designing for emotions, it is important to take into account all these factors to have considerable control on the final effect.

Emotion and Cognition

It is important to understand the relation between emotion and reason to fully appreciate the power of emotions in creating intangible value. Originally, emotion and thinking were considered different phenomena. Separating emotion from cognition has been a major weakness of psychology and cognitive science. It is now widely accepted that behavior and thought are influenced equally by emotion and cognition (Khalid & Helander, 2006). The figure below depicts the interaction between the affective and cognitive systems for an external stimulus.

Figure 1: Cross-Coupling of Affect and Cognition

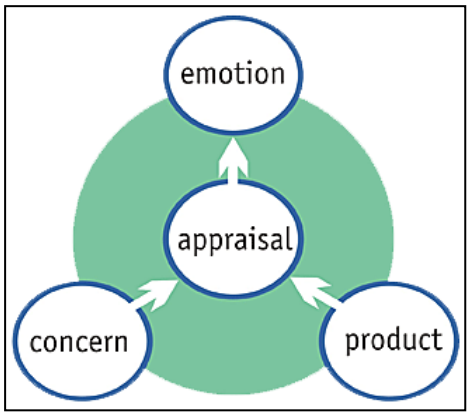


Emotional design also depends to a huge extent on pleasure derived from using the product. The terms affective, hedonic, and emotional design are generally used interchangeably to mean design that is devoted to the promotion of pleasurable human-product interaction. Pleasure is also defined as the emotional and hedonic benefits derived from product use (Jordan, 2002). Such interpretations portray pleasure as a resulting consequence of an emotional interaction with a product and a possible measure of those emotions. However it is important to note that displeasure can be an equally significant measure of product emotions.

A Basic Model of Product Emotions

All emotional reactions result from an appraisal process in which the individual appraises the product as (potentially) harmful or beneficial to one or several of his concerns. Desmet and Hekkert (2002) established a basic model of product emotions that represents this underlying process. The model, which is shown in Figure 2, sets three main parameters in the eliciting process of emotions: (1) appraisal, (2), concern, and (3) product. The first three parameters, and their interplay, determine if a product elicits an emotion, and if so, which emotion would be evoked. For example, a concern for luxury may cause a person to appraise a BMW as being beneficial, but a concern for economic spending may cause the same person to appraise it as harmful.

Figure 2: A Basic Model of Product Emotions (Desmet & Hekkert, 2002)



The individual components of the model are briefly explained below:

- Appraisal: Cognitive theorists of emotion argue that an emotion always involves an assessment, or appraisal, of how an event may harm or benefit a person. This appraisal is a non-intellectual, automatic evaluation of the significance of a stimulus for one's personal well-being. The notion that appraisals mediate between products and emotions explains why people differ with respect to their emotional reaction to a given product.

- Concern: Every emotion hides a concern, that is, a more or less stable preference for certain states of the world (Frijda, 1986). According to Frijda, concerns can be regarded as points of reference in the appraisal process. Thus, the significance of a product for our wellbeing is determined by an appraised concern match or mismatch: products that match our concerns are appraised as beneficial, and those that mismatch our concerns as harmful.

- Product: Emotions always imply and involve a relation between the person experiencing them and a particular object. With respect to emotional responses to products, a basic distinction can be made between emotions of which the object is the 'product' as such

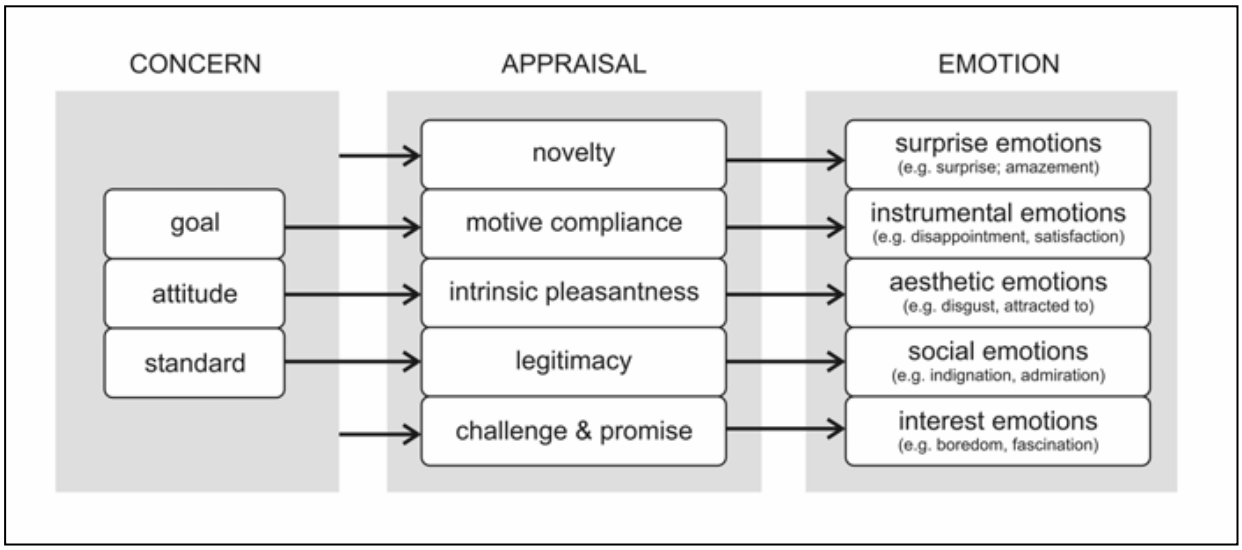
(e.g. "I am excited by the soft finish of this chair"), and emotions of which the object is some association or 'fantasy' that is induced by the product (e.g. "I am excited by the idea of surprising my friends with this chair").

All the above stated components interact to produce a variety of emotions as explained below.

Classification of Product Emotions

Product emotions can be classified into the following five classes: instrumental, aesthetic, social, surprise, and interest emotions (Desmet, 2003)which is presented in Figure 3 below. It should be noted that each emotion type is appraised in a specific way and is associated with a particular concern as shown in Figure 3. A brief explanation of the five types of emotions follows.

Figure 3: Classification of Product Emotions (Desmet, 2003)



1. Instrumental Product Emotions: These are emotions elicited by products which we believe can help us achieve our goals. The concern type involved with instrumental emotions is 'goal' and a product that facilitates goal achievement will be appraised as 'motive compliant'. For example, a women's goal to look attractive will make her apprise a pair of elegant shoes as motive compliant and this will eventually result in desire.

2. Aesthetic Product Emotions: These result as a consequence of a product's look, feel, smell, taste and sound. The concern type associated here is attitude and the product that matches our attitude is appraised to be 'appealing'. For example, a person's positive attitude for colorful objects can make a vibrant painting appealing and eventually result in desire.

3. Social Product Emotions: These emotions result as a consequence of personal standards and societal norms. The concern for 'standard' makes us appraise products as 'legitimate'. For example, the standard against violence can appraise a violent video game as illegitimate and create contempt.

4. Surprise Product Emotions: Any product (feature) that is appraised as 'novel,' i.e., sudden and unexpected, will elicit a surprise response. Surprise emotions differ from the previous three emotion types because they are not related to a particular concern type. Instead,

pleasant surprise is elicited by a sudden and unexpected match with any concern (i.e., a goal, attitude, or standard), and unpleasant surprise is elicited by a sudden and unexpected concern mismatch. For example, a person first encountering a wireless mouse can be pleasantly surprised as it matches his concern for comfort.

5. Interest Product Emotions: This category comprises emotions like fascination, boredom, and inspiration. These emotions are all elicited by an appraisal of challenge combined with promise (Tan, 2000) and all involve an aspect of (or lack of) stimulation. Products that evoke interest emotions make us laugh, stimulate us, or motivate us to some creative action or thought. For example, the need for stimulation may create interest in the restyled version of an old car and result in fascination.

On the whole, the study of emotions implies that design should take into account the possible co-occurrence of all the above types of emotions to have the desired effect.

2.2.3 Knowledge

According to Webster's dictionary, knowledge relates to perceptions gained by experience and skills. It is the awareness or familiarity of a fact or situation. Knowledge depends on the customer's awareness, perception and expectation of a company and its products (Steiner & Harmon, 2009). The customer's awareness refers to the level of awareness a customer might have of a brand. The higher the level of a customer's awareness of a brand, the more likely the customer is to buy that brand. Customers prefer to buy familiar products compared to less familiar ones (Yasin, Noor, & Mohamad, 2007). The brand awareness can be considered in depth and breadth. Depth refers to how easily it is for a customer to recognize a brand. Breadth refers to the number of purchase or consumption situations in which the brand comes to the customer's mind. A brand with both depth and breadth will create higher customer value (Keller, 2001).

The perception of a customer will clearly influence the value of a product for him or her. From the perception a customer will establish brand associations which relate to the function and performance of a product and more abstract, intangible aspects of a brand (Keller, 2001). One association of the brand relates to the profiles of the users of the product which can influence the view of a brand as being "popular". The other associations relate to the purchase and usage situation, the personality of a brand and the history, heritage and experience of a brand. All these associations can influence the perception of a customer in regards to the product. This perception is based not only on the individual's concern, but also on the importance of other's perception of a product. Both will influence the perceived value of a product. A customer's perception is influenced through his or her cultural background, brand communities or word-of-mouth. Word-of-mouth can alter customers' perceptions and even judgement of a product, because the trust between peer consumers is higher than the trust toward the company (Lee & Youn, 2009). Through other's perception a customer might recognize the differentiation and superiority of a brand relative to other brands and thus will be influenced in the purchasing decision (Yasin et al., 2007).

Finally, the confidence in a brand's product to give an expected outcome will increase its value. The expectations are influenced by the brand credibility (trustworthiness, expertise) of a company (Erdem & Swait, 2004). Expertise relates to the perception that a firm has the capability to deliver on its promises whereas trust relates to the perception of a firm's willingness to carry through on a promise. If the customer trusts a company to fulfil his or her expectations, this will influence the brand choice. Erdem & Swait (2004) show that

trustworthiness of a company has even more impact on a customer's brand consideration than expertise. Country of origin is another factor that can influence a customer's expectation of a product or service. Customers may perceive a product as "superior" or "inferior" depending on the country it stems from (Yasin et al., 2007). Thus country of origin can directly influence the evaluation of products and brands. An example is the expectation of high engineering quality from German cars. Especially in situations when there is consumer uncertainty about brands and information is not available, the credibility of a brand will influence a customer's attitude and purchasing decision (Erdem & Swait, 2004). The expectation can increase the value of a product for the customer, because he or she believes in the ability of the company to deliver the expected product (Steiner & Harmon, 2009). As a consequence the attitude towards the actual purchase of the product is positively influenced. In this situation companies have the chance to build customer loyalty by measuring up to the customer's expectations (Zineldin, 2006).

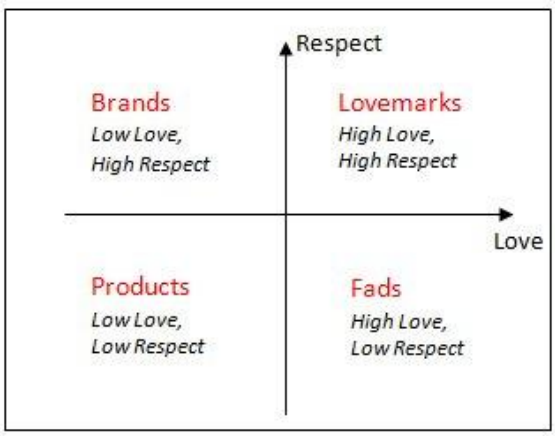
If a company can establish "knowledge value", it can drive the customer to choose their brand whether or not their products are actually superior to those of other brands. Customer's brand awareness, the loyalty to a brand and the perception of a brand's quality influence a brand's equity (Yasin et al., 2007). Addressing the knowledge dimension thus can increase the company's brand equity and provide a platform for competitive advantage.

2.3 Dynamic Interaction Between Dimensions

Thus far in the paper, we have considered the intangible dimensions individually and analyzed how each adds value to the final product. But, it is possible that the value originating in one dimension can trigger responses in another dimension and result in a possibility to co-create value. This value is generally more pronounced than that elicited by the individual dimensions. To examine this dynamic flow of value, it is necessary to understand the relationships between the different dimensions and their interactions.

There are many theories in marketing literature that imply a relationship between the individual intangible dimensions. For example, the theory of Lovemarks (Roberts, 2005) describes how love (emotion) and respect (knowledge) can be co-created and lead to increased brand loyalty. Roberts defines Lovemarks as 'super-evolved brands' which maximize their connection with consumers by creating strong emotional bonds. To create a Lovemark, marketers need to not only build respect but also have to overlay a loving and close relationship.

Figure 4: The Lovemark Grid (Roberts, 2005)



This is depicted in Figure 4 which categorizes products into various positions on the grid based on the amount of love and respect people have for these products. In the case of Lovemarks, factors of love (intimacy, mystery and sensuality) and factors of respect (trust, reputation and performance) influence one another to create loyalty beyond reason (Pawle & Cooper, 2006). Thus love and respect need not be orthogonal, but can reinforce each other to increase buyer purchase intentions.

Another example to understand the interplay of emotions and knowledge is to consider human brands as 'emotional tools' in the process of creating brand loyalty. With respect to human brands, the strength of attachment can be defined as the intensity of a person's target-specific emotional bond. A person immersed in such an emotionally significant relationship normally perceives the relationship partner as differentiated and irreplaceable (Thomson, 2006). This irreplaceable relationship can result in repeat purchases, product commitment and brand loyalty.

The concept of Total Customer Experience (TCE) is useful to understand the value flow between knowledge and experience. TCE is defined as a totally positive, engaging, enduring, and socially fulfilling physical and emotional customer experience across all major levels of one's consumption chain (Mascarenhas, Kesavan, & Bernacchi, 2006). It is said that a company's effort to provide TCE can result in 'Lasting Customer Loyalty' (LCL), which is a "deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby, causing repetitive same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999). Table 1 below depicts the process by which consumers move up the loyalty ladder when they encounter increasing levels of Total Customer Experience.

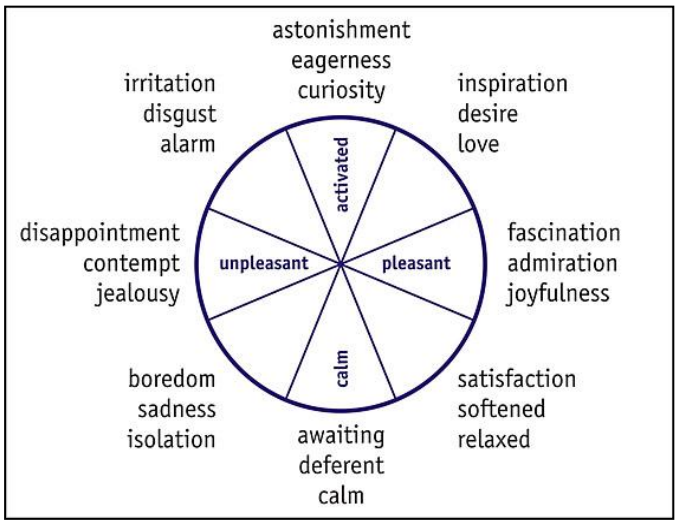
Table 1: Customer Loyalty as a function of Total Customer Experience (adapted from Mascarenhas et al., 2006)

Customer Loyalty Ladder	**Total Customer Experience Ladder**
Brand Community Purchase	Unique product/service brand community bonding and enhancing experience in shopping, purchase and use. **Lasting Customer Loyalty**
Lifetime Family purchases and Commitment	Unique product/service, positive, socially bonding and indispensible experience in shopping, purchase and use
Total category Purchase	Unique, engaging and self-actualizing product/service experience in shopping, purchase and use
Regular Brand Purchases	Unique and reinforcing positive product/service experience in shopping, purchase and use
Frequent Brand Purchases	Unique positive product/service experience in shopping, purchase and use
Referral Brand Purchases	Inter-Buyer expectations regarding products/services fulfilled
Repeat Brand Purchases	Positive customer satisfaction beyond expectations
Random Brand Purchase	Customer Expectations are fulfilled

Experience not only interacts with knowledge as described above, but also has an inseparable relationship with emotions. This can be understood by dwelling into the effect of an experience. Product experience is defined as a change in core affect that is attributed to human-product interaction (Desmet & Hekkert, 2007). Product experience refers to an experience that is affective. Russell (1980, 2003) introduced the concept of 'core affect' by combining the affect dimension with physiological arousal into a circular two-dimensional model (Figure 5). The horizontal axis represents valence (from unpleasant to pleasant), and

the vertical axis represents arousal (from calm to excitement). The various positions on the circumflex structure indicate affective responses that can be experienced in the user-product interaction. Core affect theory offers a simple, yet powerful, way to organize product experience, because all possible experiences involved in the user-product interaction can be described in terms of core affect.

Figure 5: Circumplex Model of Core Affect (adapted from Russell, 1980)



The activated unpleasantness from the heated irritation in response to a failing computer or the calm pleasantness from the soothing experience of sliding into a warm bath can all be plotted on the circumflex model. This theory shows that whenever there is an experience, a consequential emotional response is inevitable. This presents another challenge for designers to investigate the various emotions that a particular experience will elicit and to tailor experiences to produce specific emotions.

The concepts mentioned above are just a few of the many that demonstrate the interplay between the dimensions. The important takeaway from all this is that creating intangible value need not be a one-dimensional process. If companies can understand the strengths and weaknesses of the relationships between dimensions, they can create value across multiple dimensions. These complex interactions would result in an offering which would be increasingly difficult to imitate or replicate for competitors.

While studying the various interactions, a taxonomy was developed (Appendix B) that cited indications of valid relationships. The important learning from this taxonomy was that the value need not mediate between just two dimensions, but can eventually flow across all the three intangible dimensions.

3.0 Conceptual Model

3.1 Theory of Planned Behavior

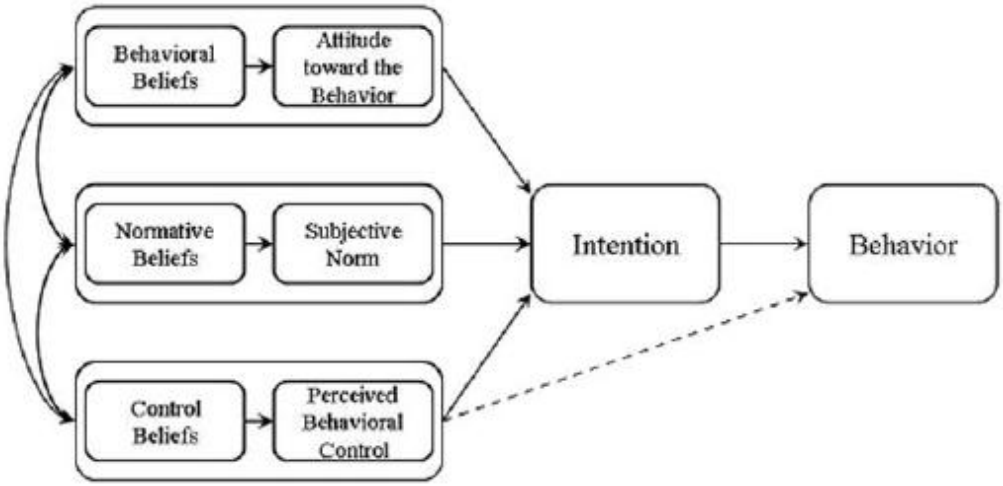
The psychology of a consumer is influenced, among others things, by memory and cognition, affect and emotion, judgement and decision and group dynamics (I Ajzen, 2008). The theory of planned behavior can help to understand and explain the behavior of customers by describing the effect of consumer attitudes on actual behavior. According to Ajzen (2008) the

theory explains that people's intentions and actions are guided by their beliefs about the outcome of buying a product. A customer for example might prefer a brand named product over a generic one even if they are of same quality. The purchase is not necessarily made based on objective attributes of the product. The theory can thus help to describe how subjective attributes which are based on a customer's knowledge, emotion or experience can play a role in the purchasing decision of a customer.

The theory of planned behavior originates from Fishbein's and Ajzen's theory of reasoned action. The theory of reasoned action is a widely used model which helps to explain the development of intentions and behavior for individuals (Madden, Ellen, & I. Ajzen, 1992). In comparison to the theory of planned behavior, this theory assumes that individuals have full volitional control over the behavior being studied. Azjen, however, extended the theory of reasoned behavior arguing that individuals in general will not have full volitional control.

In the theory of planned behavior which is the basis of the model developed in a later section of this paper, intentions are a function of the beliefs about the outcome of a particular behavior. The beliefs are divided into behavioral, normative beliefs and control beliefs (Madden et al., 1992).

Figure 6: The Theory of Planned Behavior



Behavioral beliefs are the accessible, subjective beliefs about the expected outcomes of engaging in a behavior. Behavioral beliefs then form the attitude towards the behavior. The attitude is the degree to which the expected outcome of the behavior is positively or negatively evaluated. The more favorable the evaluation of the behavior is the higher will be the intention to perform this behavior (Ajzen, 2008).

According to Ajzen (2008) normative beliefs refer to the perceived behavioral expectations of such important referent individuals or groups as the person's family, friends and co-workers. In combination with a person's motivation to adhere to these influencers, the normative beliefs determine the subjective norm regarding the behavior. The perceived social pressure to engage in a behavior (subjective norm) will lead to the intention and then to the actual behavior (Ajzen, 2008).

In the theory of planned behavior the perceived behavioral control is an antecedent to the intentions. The control beliefs refer to how many resources and opportunities individuals think they possess to be able to perform the behavior. This will influence the perceived

behavioral control. The perceived behavioral control which refers to the perception of individuals of their ability to perform a given behavior will have an indirect effect on behavior through the intention. If individuals belief that they have only limited control on the performance of the behavior, the intentions to perform the behavior are low. According to Ajzen (1987) the perceived behavioral control can both have direct influence on behavior and indirect effect on behavior through intentions. People's behavior will be influenced by the actual control they have on performing the behavior. Studies showed that including control beliefs into the model increased the accuracy of the prediction of intentions and target behavior (Madden et al., 1992). The self-efficacy in relation to the behavior (perceived behavioral control) has a significant influence on the intention to engage in the particular behavior.

In combination, the three beliefs form the behavioral intention which will be stronger depending on the positive evaluation of attitude, subjective norm and perceived behavioral control. As an antecedent of behavior, if the intention is strong enough, people are expected to transform their intention into the actual behavior (Madden et al., 1992). A significant realization in this context is that the intention to engage in the behavior is mostly dependent on subjective attributes influenced by an individual's knowledge, experience or emotion. An example Ajzen mentions is the purchase of a Rolex watch. The customer's intention to purchase a Rolex watch might well be influenced by the attitude and the subjective norms in regards to this product. A customer might for example be influenced by the people around him who expect him to buy an expensive watch to be a part of the group and by the fact that a Rolex watch conveys a higher status. As long as the customer places a high value on these beliefs, the purchase of a Rolex watch would just be a logical step.

3.2 Developing a Model Based on TPB

The Theory of Planned Behavior (TPB) has a lot of strong elements to influence buyer behavior and thus was considered to be a good foundation for a model for intangible value flow. Beliefs bear a close resemblance to aspects of the knowledge dimension. The first step is to map the various beliefs in TPB to sub dimensions in knowledge.

Behavioral beliefs deal with the expected outcome of performing a particular behavior. When someone buys a product, they expect to have certain outcomes when using it. For example, a person buying a car can have a behavioral belief that it will give him a higher mileage. These beliefs can be based on what we think about a brand's capabilities, its ability to produce quality goods, trustworthiness of the brand, country-of-origin effects, etc. These characteristics can be grouped under the category of 'expectations' under knowledge.

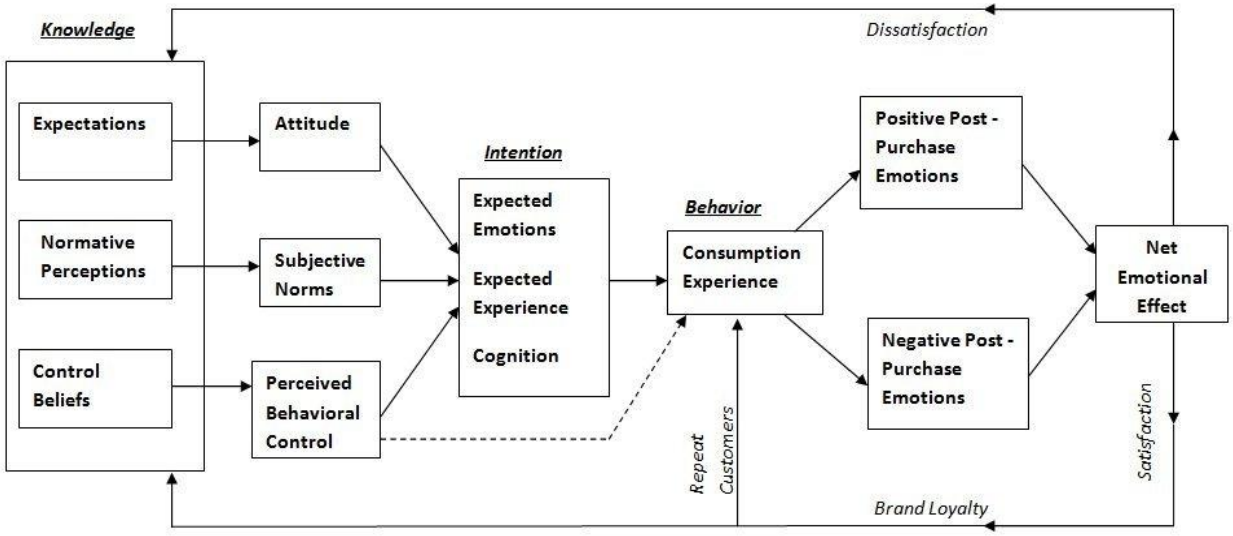
Normative beliefs are a person's notion about how the society (or the individual's close social circle) will evaluate or assess the behavior. With respect to product purchases, we are not only worried about our preferences, but also about the image that would result from that purchase in our close social circle. An example would be, "If I buy this car, I will be considered stylish by my friends". These beliefs correspond to social outlook, cultural norms, brand community influence, etc and can be grouped under the category of 'perceptions' in knowledge.

Control Beliefs deal with factors that facilitate or impede the performance of a behavior and indicate the amount of control a person perceives he possesses to actually perform the behavior. There are many things that we cannot control when we plan to buy/use a product. For example, a person might believe that the non-availability of dealers in his area would

prevent him from buying a car. Control beliefs encompass various aspects like product accessibility, financial assistance, the extent of help/support that a brand provides, quality of service, etc which all can be considered as part of the knowledge dimension.

The model that was developed appears below (Figure 7). It can be seen that the beliefs of TPB have been completely replaced by the knowledge dimension. Various elements of knowledge will influence a person's attitude, subjective norm and perceived behavioral control and eventually result in an intention. Intention, which is defined as the readiness to buy a product, would contain both a cognitive and emotional component because, *"brand decisions are not wholly rational…however hard we think about a decision, we can only make that decision via an area which interfaces with our senses, emotions, instinct and intuition. We are physically incapable of making decisions based on purely rational thinking"* (Heath, 2001). The emotions and experience that come to play in this pre-purchase phase strongly influence a person to transition from intention to actually perform the behavior.

Figure 7: Product Value Model; refer to Appendix C for a larger view of this diagram.



The behavior is the consumption experience and involves human-product interactions resulting in a change in affect/emotions. A product can trigger positive, negative or mixed emotions depending on how an individual appraises the experience. For example, buying a BMW can result in pride for owning a stylish vehicle and simultaneously trigger guilt for making an expensive purchase. The net emotional effect represents the sum total of all the emotions experienced. This would represent the final emotional impact the product creates and feeds back into the knowledge dimension. For example, if one's pride in owning a BMW was higher than their guilt of overspending, the resulting net positive emotion toward the vehicle would be positive. When the net emotional effect is positive, the customer is satisfied and this feedback will increase his attitude and intentions to do a repeat purchase. If the net effect is negative, the customer is dissatisfied, which feeds back into the knowledge dimension resulting in lower levels of attitude and intention to buy the product again.

In the case of repeat customers, a shorter feedback cycle is possible where the net effect feeds back into the experience instead of knowledge. This is due to the fact that once a customer is satisfied, the intention and attitude to buy the product are well established in his cognitive structure. Affective commitment will have a greater impact than calculative commitment in

explaining customers' intention to return and recommend (Bowden, 2009) .This makes us consider a very small incremental effect or none in the knowledge dimension. Customers are usually more focused on gaining a better experience and emotional response from their repeat purchases than being concerned about the capabilities and perceptions of a brand.

3.3 Design Cues

The intangible value dimensions described in this model can be translated into product attributes using the concept of design cues which can evoke predictable responses in particular dimensions. Design attributes of a product can influence every phase of the user's interaction with the product, ranging from initial awareness to behavior, including use and reuse. Design factors can therefore make the difference between a potential customer and an actual customer. Once a customer buys a product, a product design which is pleasing to the user will promote product and brand loyalty, leading to repeat purchases and positive network effects such as word-of-mouth recommendation. As we will see, design factors also strongly tie into emotional response and thus create the net emotional effect as described in the model above.

A design cue is a design characteristic of a product and can be either physical or intangible. Obvious examples are physical traits such as shape or size. Less objective design cues include ergonomics, styling themes, and product prestige. Design cues can be divided into the categories of Visceral, Behavioral, and Reflective (Norman, 2004). Our research considered several product examples and found that products can and often do contain cues from each of these three categories. As well, there is sometimes a dominant category which may define the product in terms of user perception. An in-depth look at product examples will follow, but first an overview of these three design categories is presented.

3.3.1 Visceral Design Cues

Even a product as simple as a sheet of paper has physical attributes which stimulate our senses. Qualities such as weight, texture, and color provide the user with positive or negative impressions of the paper, along with an array of potential emotional responses. A couple shopping for wedding invitations might buy a particular stock after falling in love with how it feels. We are drawn to products with visceral design attributes not for what they do or how well they do it, but for how they look, sound, feel – how they excite the senses. Visceral design cues also include design attributes which trigger human responses that are hard-wired in our brains – reactions we have before we even have time to think about them. Norman links these to our basic animal instincts, such as the resulting fear from looking down from a high cliff, or the pleasurable quality of hearing a harmonious musical chord. A car may offer visceral pleasure by emitting a pleasant-sounding door chime. A car engine that makes a random and harsh noise would have an opposite, displeasing effect. The thrill and pounding heart which might result from driving down a twisty road is also an example of a visceral response. The feel of a cashmere sweater or an iPhone in your hand are other examples. Products of all types can have visceral design cues (Norman, 2004). Following is a discussion of some of the key visual and physical design cues.

Color

Color is the most dominant design element, and ironically, the most relative aspect of design. Color creates, connects and informs. Color is engaging, evocative and visceral. It arrests attention and compels emotional response (Akers, 2009). Color is a tool that must be managed

and applied purposefully to achieve its maximum effectiveness. In harmony with line, shape, proportion, texture and relational placement, color can attract or deflect attention, infer weight and momentum, imbue mood or modify meaning. Visual perception of color is dependent on light, object, and our eyes and brain.

If a picture is worth a thousand words, a picture with natural colors may be worth a million, memory-wise. Psychologists have documented that "living color" does more than appeal to the senses. It also boosts memory for scenes in the natural world. Color helps us to process and store images more efficiently than colorless (black and white) scenes, and as a result to remember, too (Wichmann, Sharpe, & Gegenfurtner, 2002). Thus, we might say that color increases memory**.** Color is also very influential to brand identity in different ways. For example, products are available in a range of colors nowadays, which helps them to appeal to a wider target market. When Apple introduced the first colorful iMacs, it helped to reinvigorate their brand which had suffered $1.8 billion of losses before (DeVincenzi, 2009).

Research conducted by the Institute for Color Research reveals that "people make a subconscious judgment about a person, environment, or product within 90 seconds of initial viewing and that between 62% and 90% of that assessment is based on color alone ("Color in Web Design," n.d.). Color can have modes of appearance, such as luster, iridescence, luminosity, transparency, chromatic light ("Visual Illusions of Color « Fiber Fantasies," n.d.). Colors can also have powerful cultural-specific relevance (Salla, 2005) (Appendix D). Many marketing researches try to discover which colors influence human behavior and how people will act when they shop or eat. Trends seem to come and go, and other variables in addition to color affect behavior. While technology contributes to color trends, culture and social phenomena also affect the popularity of colors (Martinson & Bukoski, 2005).

Shape

Shape is one of the basic elements of design. Shape can convey universal meanings as well as guide the eye or organize information which can come alone or in combination with other shapes or lines. The three basic types of shapes are geometric, natural, and abstract. Geometric shapes are structured, often symmetrical shapes. These include squares, circles, and triangles – but also octagons, hexagons, and cones. Natural shapes are found in nature or they can be manmade shapes. Leaves are an example of a natural shape. An ink blob is a natural shape. Natural shapes are often irregular and fluid. Abstract shapes are stylized or simplified versions of natural shapes. Symbols that found on signs, such as the stylized wheelchair shape for handicapped access is one example of abstract shapes (Kyrnin, n.d.). Ideas about the ideal shape of products are usually related to what people are most familiar with and think appropriate or natural. One study mentioned that new packaged products incorporating a more natural shape or theme are more likely to be successful. Product shape may become a differential advantage in highly competitive environment (Berkowitz, 1987).

Design is becoming increasingly innovative and imaginative in terms of shape; however, different forms have been fashionable over the years. Extreme forms tend to attract niche markets. Certain consumers are attracted to such products because they like to buy things because they appear different.

Texture and Material

Material and texture are both important factors when considering product appearance. Texture can be described in two perspectives or two scales. One is appreciated for a material's visual appearance and tactual feel at the macro scale. Another scale is transplanted to a more specific term in the study of materials science and engineering. Material texture plays an important role in the perception of the whole product's beauty and value. To understand and identify a

texture, three streams of information should be considered: one, the objective parameters that determine the geometrical, physical or chemical attributes of the texture; two, the subjective description of texture and human responses to texture through different sensory routes; three, the psychophysical relationship between the above two aspects. Texture can be generated or learned from nature, mind and fantasy, innovation in science and technology, virtual reality, and micro-world and social events (Zuo & Jones, n.d.). Different materials suit different products aesthetically as well as functionally. For example, plastics tend to be selected for mobile phones due to their functional properties. Products can be perceived differently if the texture and finish are altered. At present, there a large range of finishing textures available for materials which companies can choose for their products which can make a differentiation to a product as well.

Usually, it seems difficult to find appearance properties to fit all designs, and there is no sense in trying to apply the appearance features of one product to another. Different aesthetic qualities and styles suit different products. Nevertheless, this does not mean that different products should not have some commonality in the expression of design. It is this very commonality or similarity in aesthetic features, even if this commonality can be quite limited, that can be applied as a reference when considering the design and aesthetic of a new product.

3.3.2 Behavioral Design Cues

We've all had the following experience. We buy a product because it appeals to us on a visceral level. It looks really cool. It has a great color. It sounds awesome. But then after we get it home and start the relationship, things begin to sour. Perhaps it simply didn't offer the expected functionality. Or maybe it was just too difficult or time-consuming to operate. Your love-at-first-sight product ends up in the basement or on eBay. This product was weak on behavioral design cues. Behavioral cues are about performance. They're about getting products to function well, and about making that functionality easily accessible. They also incorporate the concept of flow, which is the seamless interaction between the user and the system itself. Flow brings emotional pleasure to the user and it's often overlooked by designers who sometimes focus more on visual appearance. Behavioral design cues include good ergonomics, convenience, and intuitiveness. The iPhone which was discusses earlier under visceral pleasure goes to the next level by also providing an extremely intuitive user experience (Norman, 2004).

3.3.3 Reflective Design Cues

The reflective design category is all about what the product represents, not what it does or how it does it. Reflective design cues tie into our self image, our beliefs, and our values. We want to be seen using products with these themes because they make a statement about who we are. Reflective design attributes include retro or futuristic designs, "green" attributes, healthy, luxurious, prestigious, budget, exclusive, and "coolness" factor. A product with extremely strong reflective attributes may be appealing to a consumer, even though it may be lacking in attractiveness or functionality relative to competitive products. For example, British appliance maker Dualit offers a toaster model which retails for over $200. It features a retro theme and is styled in chrome. Does it toast bread any better than a $20 model? That is probably debatable. People buy the Dualit toaster, at least in part, because of how it looks on their kitchen counter. It makes a statement about being stylish, and possibly about being affluent as well. Reflective attributes have played a role in the success of the Toyota Prius because of its "green" statement. The aforementioned iPhone wins in each design category by also being the "cool" phone that people want to be seen using (Norman, 2004). Finally, reflective design factors are closely tied to cultural and societal trends, so they're not easily

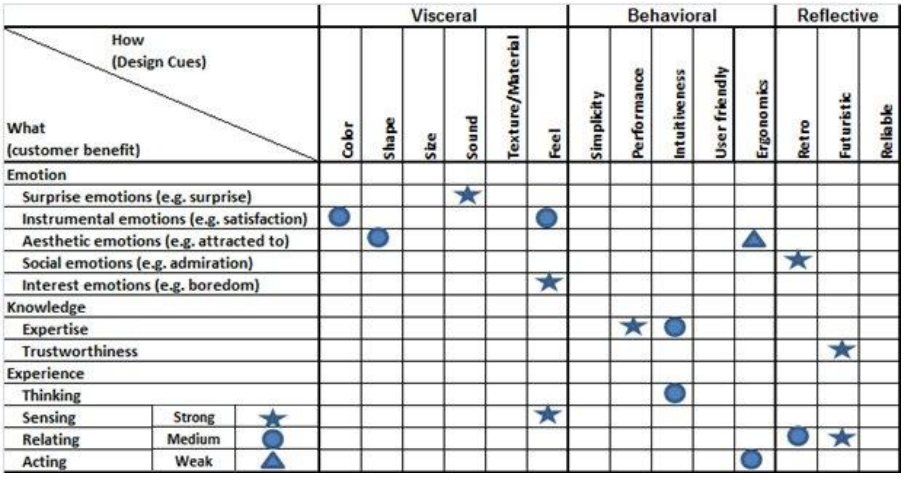
predicted and are prone to change – sometimes with little notice. So the product which scores high in this category today could be tomorrow's dud. For example, Google's new Android phone could steal the "gotta have it" spotlight from Apple. The end of the low-carb fad spelled bankruptcy for Atkins. Reflective design elements are also intellectually driven. They are influenced by the knowledge and experience of the designer as well as the user, and they relate to cultural aspects and other idiosyncrasies (Khalid & Helander, 2006).

3.4 Leveraging Design Cues

There's no simple formula or rule to determine the correct design cues for a given product or product type. But it's important to consider that some products are inherently inclined toward certain design types. For example, someone buying a financial calculator will likely be most interested in behavioral design cues. As Norman discusses, however, there are also *users* who are predisposed toward visceral, behavioral, and reflective influences when making product purchase decisions. In other words, someone out there will prefer their calculator in purple or with a Porsche Design label on it.

The Quality Function Deployment (QFD) framework can help product managers to understand which design cues will influence the intangible dimensions of knowledge, experience and emotion, which, according to the model described above, dominate the decision process of a customer. Quality Function Deployment (QFD) is a systematic process for new product development which helps a multi-functional team of engineers and marketers transform user demands into a product design, thereby ensuring the implementation of the voice of the customer (Baier & Brusch, 2005). The first step in this process is the description of a so-called "House of Quality" (HOQ). The House of Quality is a kind of conceptual map which provides the means for inter-functional planning and communication, such as between marketing and design, or engineering (Clausing & Hauser, 1988). There are many different forms of the House of Quality, but its ability to be adapted to the requirements of a particular problem make it a very strong and reliable system to use. The HOQ's matrix format helps to capture the customer attributes – in this case the intangible dimensions and their sub-categories – and convert them into engineering characteristics, or design cues. Through the use of symbols, the degree of relationship between individual design cues and intangible value dimensions can be represented. Figure 9 illustrates an HOQ for the design cues and the intangible dimensions knowledge, emotion and experience. In this example, feel is positively related to both emotions and experience.

Figure 9: Example HOQ Matrix



To prepare such a matrix, product managers must research and understand the needs and desires of their users, using methodologies such as surveying lead users. They must also factor in the competitive landscape along with current social and cultural trends. For existing and mature products, product managers must stay in tune with their user communities and understand the value they're deriving from the product.

Substantial research regarding sensory experiences such as color, shape, and texture, and their effects on humans, already exists and can further help to define design cues for the mapping process. For example, people generally prefer curved shapes over angles, though there are exceptions (Bar & Neta, 2006). Toyota used shape to make their Prius instantly recognizable as a hybrid, making it more appealing on a reflective level. It also designed the interior with behavioral cues, calling attention to the product's most important differentiating quality: fuel efficiency. Meanwhile, competitive hybrids looked just like their non-hybrid versions, making them less desirable to the passionate "green" consumer (Rego, Stempel, & Mintz, 2007). The Prius was a behavioral and reflective home run for Toyota.

With the help of the HOQ matrix, product designers can define customer requirements for product development, which can influence the intangible value of a product. The model described above also facilitates an understanding of which design cues play a role in the customer's decision process. For example the reflective design cues play a greater role for first time customers, while for a repeating customer, visceral design cues might be more important. Ultimately, as the literature review described, the different intangible value dimensions are interrelated, and one design cue might influence not only experience, but also the emotion dimension. The objective for product designers is to design for a positive reflective experience, resulting in a mix of emotions which collectively form the net emotional effect.

Table 2: Overview of Design Cues

Category	What It's About	Example Cues	Example Responses
Visceral	Appearance; affecting the senses and basic instincts	Color, shape, size, sound, feel, sound	Excitement, happiness, fear, amusement, relaxation, surprise, contentment, shock
Behavioral	Usability and functionality	Simplicity, intuitiveness, ergonomics (ease of use, convenience, portability, portable) – user friendly.	Satisfaction, confidence, comfort, frustration, anger, confusion, pleasure
Reflective	Image and themes	Retro or futuristic designs, "green" attributes, healthy, luxurious, prestigious, budget, exclusive, "cool" factor.	Pride, virtue, exclusivity, confidence

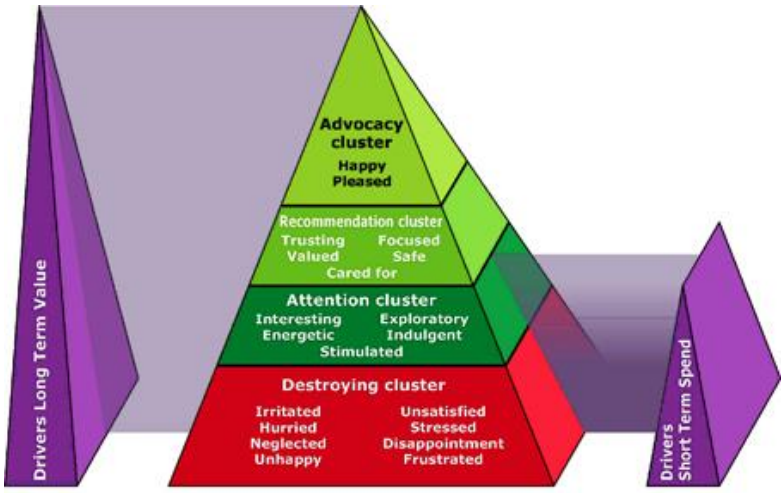
3.5 Emotional Signature

An important issue for product managers will be how to determine whether the net emotional effect created customer value and increased customer loyalty. The Emotional Signature model provides valuable clues as to how to accomplish this. "A Customer Experience is an interaction between an organization and a customer. It is a blend of an organization's physical performance, the senses stimulated and emotions evoked, each intuitively measured against

customer expectations across all moments of contact."(C Shaw, 2007). While a customer experience can clearly be physical, the most critical part is about the emotions involved and how a customer feels. Colin Shaw's research showed that over 50% of a customer experience is about emotions. According to Shaw (2007), emotions can be seen as an onion with many layers. A person has to peel through these different layers to finally get to the core. When looking at the reasons why people buy a certain type of car model, for example, one has to understand that it's not only about having a car that carries the person from A to B, but also about facts like the enjoyment of the ride, the status that it gives, or the jealousy it creates in others. Another example is delivered by the reasons why a person buys an Apple laptop, which is usually more expensive than comparable products from competitor brands. Some of the reasons are clearly related to the product's physical attributes like portability, high product quality or long lasting battery, but there are several reasons on the emotional side that one should consider. Buying an Apple laptop will help the buyer become part of a desired group, his friends will consider him cool, and he will be proud using and showing it off in public. However, it is by far easier to design a physical process than planning to evoke emotions in customers.

According to Shaw (2007), every organization has an Emotional Signature™ embedded in their customer experience. This signature is unique to every organization and refers to a cluster of emotions that define what customers feel about the company. It affects a company's value generation and it can be the underlying reason for a good or bad revenue performance. Organizations should try to understand the cause for this unique signature and find ways to evoke positive feelings like "cared for" or "valued" in order to increase their customer value. This is where the Emotional Signature model (Figure A) comes into play. It consists of four emotional clusters: one cluster is a value destroyer (Destroying Cluster), while the other three clusters are value drivers (Attention, Recommendation and Advocacy).

Figure 8: Hierarchy of Emotional Value (Source: Shaw, 2007)



When trying to improve Customer Experience, an organization should first look at the ***destroying cluster of emotions.*** It represents negative emotions that an organization, knowingly or unknowingly, evokes in their customers. The cluster not only destroys value but costs organizations money, for example through customer complaints or product returns. It leaves customers frustrated if they, for example, have to wait long to speak to a customer service agent or they might even feel neglected if the customer service agent is not willing to

help them. Destroying emotions cannot be removed entirely. However, organizations should define action steps to weaken them in order to increase overall customer experience.

The ***attention cluster of emotions*** includes emotions that increase short-term customer spending. Customers are attracted to an organization by evoking emotions like "interesting" or "stimulating". By attracting customers, the organization gets a temporary high. The danger inherent in this cluster, however, is the fact that what attracted customers in the first place, may not turn them into long-term customers and therefore might not result in customer retention. An example is a customer's first time visit to an amusement park, which might be stimulating and exciting. However, these emotions fade and the experience even becomes boring after a while. In order to retain customers, an organization therefore needs to evoke emotions from the recommendation cluster.

The ***recommendation cluster of emotions*** as well as the ***advocacy cluster of emotions*** should be the focus of organizations who want to have loyal customers and strive for building long-term relationships with their customers. The recommendation cluster includes basic emotions like "valued" or "trusted" and is about gaining customers who will recommend you. This cluster is more of a reactive state, however. Customers might recommend an organization, if they are being asked for their opinion but they would not do it proactively. The advocacy cluster, on the other hand is about proactive recommendation. It only contains two emotions: "happy" and "pleased". Organizations aim for this state, since it represents the most affordable form of marketing and the ultimate driver of customer loyalty (Colin Shaw, 2007).

With regard to our model, the Emotional Signature describes important value drivers which influence a customer's intentions and the net emotional effect. It can play a significant role in making the transition from intention to behavior, and can be a metric to measure the influence of the net emotional effect on customer's loyalty.

4.0 Case Studies

In the following section we will examine four products and look for examples of how designers have successfully (and unsuccessfully) leveraged visceral, behavioral, and reflective design factors to create customer value and loyalty. We'll also tie these examples into associations with knowledge, experience, emotions, and our model.

4.1 Coca-Cola Zero

The Coca-Cola Company is the world's largest manufacturer, distributor and marketer of non-alcoholic beverage concentrates and syrups. Its flagship product, Coca-Cola, was invented in 1886 in Atlanta. The company has a product portfolio of over 3,000 beverages today, and sells them in more than 200 countries worldwide. Coca-Cola Zero (also known as "Coke Zero) was launched in 2005, after research showed that young male adults were looking for a low-calorie drink, but refused to buy Diet Coke, since the word "diet" was considered feminine and girly (Seckler, 2007).

Coca-Cola Zero is positioned as a zero calorie/zero sugar drink (depending on the country), targets young male adults, and has even been nicknamed "Bloke Coke". In contrast to Diet Coke, which is sweetened with aspartame only, Coke Zero is sweetened with a blend of aspartame and acesulfame potassium (Ace K). Further variants are Cherry Coca-Cola Zero

and Coca-Cola Vanilla Zero (Hickman, 2006; Coca-Cola Company Information: Behind The Coca-Cola Brand," n.d.).

Coca-Cola Zero is loaded primarily with visceral and behavioral design cues, but also shows some reflective ones. The table below lists examples for all three categories. However, some of these design cues are not exclusive to Coca-Cola Zero, but can be found for other low-calorie soft drinks as well.

Table 3: Coca-Cola Zero Design Cues

Visceral	**Behavioral**	**Reflective**
Black color	Easiness of opining can/bottle	Use of edgy humor
Shape of bottle/can	Refreshment experience	Use of masculinity
"Zero" / "Real Coke Taste Zero Calories"	Tastes like the real thing	Brand heritage
Sound when opening can		

On a visceral level, Coca-Cola Zero uses the color black, which is associated with masculine products, as well as the authentic Coca-Cola red, which helps brand recognition (Figure 10). Brand recognition is also increased through using the same bottle and can shape as other Coca-Cola products. Research showed that the word "Zero" is more appealing to the target group of young male adults than "Diet". Therefore, it is used as part of Coca-Cola Zero's brand name and throughout product communication. The slogan "Real Coke Taste, Zero Calories" promises the consumer a refreshing original Coca-Cola taste with zero calories (Figure 11). Finally, the sound that a customer hears when opening a Coca Cola Zero can stands for refreshment.

Figure 10: Coca Cola Zero bottle and can

Figure 11: Communication

On a behavioral level, Coca-Cola Zero's cans and bottles are both easy to open. The customer experiences the promised refreshment while drinking and might experience that the commercial told him the right thing. The product has real Coca-Cola taste with zero calories.

Finally, on a reflective level, Coca-Cola Zero uses edgy humor and masculinity throughout its communication, which gives it a certain "coolness" factor. The launch of Coca-Cola Zero, for example, was accompanied by a huge viral marketing campaign, which included YouTube videos of a faux lawsuit on "taste infringement". This helped Coca-Cola Zero gain a lot of attention. It was defined as the most successful launch of any brand in 20 years, according to Coca-Cola's chairman E. Neville Isdell (McKay, 2007).

Potential Coca-Cola Zero customers will most likely first experience the visceral attributes which define the product before they make their purchase decision, which is true for nearly all fast moving consumer goods. Based on our model, the net emotional effect of the product experience will determine whether the customer accepts the product and is willing to buy it again. The below "emotional scorecard" summarizes a theoretical Coca-Cola Zero user experience.

Table 4: Coca-Cola Zero Emotional Drivers

Emotion	**Emotional Drivers**	**Value**
Excitement/thrills	Curiosity/black color/edgy marketing campaign/zero	Positive
Pleasure	Black color/zero/shape of bottle/can/taste/refreshment	Positive
Fear	Zero= zero taste?/tastes like real thing?	Negative
Comfort	Brand heritage/shape of bottle/can, use of Coca Cola red, trust in brand quality	Positive
Pride	Coolness factor	Positive
Nostalgia	Brand heritage	Positive
Trust	Brand credibility	Positive
	Net Emotional Effect:	**Positive**

The overall net emotional effect in this case is positive; however it may vary from customer to customer. If, for example, a customer had a bad experience with a Coca-Cola product before, triggers like brand credibility or brand heritage will not work, resulting in negative value. Furthermore, the word "zero" can be either a positive or a negative trigger.

4.2 Nintendo Wii

The Wii, a home video game console, produced and marketed by Nintendo, was launched in 2006. The Wii targets a broader customer group than its competitors, including gamers of all age, as well as female players. As stated on their webpage: "Wii is for everyone. The ease of use and interactivity of the Wii Remote allows for a unique social gaming experience for the whole family. You don't just play Wii, you experience it." (Bremner, 2006; Wii at Nintendo," n.d.).

Its revolutionary features include the Wii Remote, a wireless motion-sensitive remote controller, built-in Wi-Fi capability and a host of other characteristics. Motion detectors translate the movement of the wand into on-screen action, making games like tennis or aerobics possible ("Playing a different game," 2006; "Wii at Nintendo," n.d.).

Nintendo's Wii is again mainly loaded with behavioral design cues. The table below shows examples for all three categories. However, some of these design cues are not exclusive to Nintendo's Wii, but can also be found for other game console products.

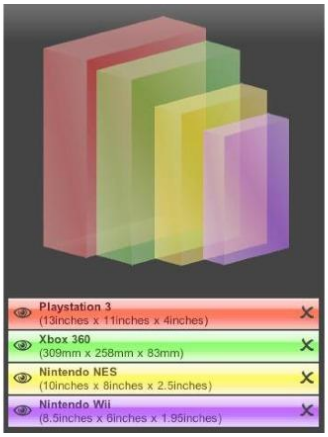
Table 5: Nintendo's Wii Design Cues

Visceral	**Behavioral**	**Reflective**
sleek design	Ease of use	social gaming experience for the whole family
Neutral color	Variety of use	Fun factor
Compact size	*"You don't just play Wii, you experience it."*	

On a visceral level, Nintendo uses a compact, sleek design for the Wii, which is associated with style and modernity. The Wii uses a white, neutral tone which fits to any television setup (Figure 12). Its compact size is another visceral design cue. The Wii is 8.5" long, 6" wide and less than 2" thick, which represents the size of three DVD cases stacked together (Figure 13, Nintendo Joystick)(Karabinus, 2006).

Figure 12: Wii Design

Figure 13: Size Comparison vs. Competition



The Wii is mainly loaded with design cues on a behavioral level. The slogan "You don't just play Wii, you experience it." is a good example for that. The Wii is extremely easy to use and provides the user with a great variety of features. It is more than just a gaming console since it comes with a wireless internet connection. It includes Wii email, the ability to download and play games online, the possibility for customers to surf the internet, or get weather and news updates. Customers can furthermore create their own character, a Mii, and play games with it. The Wii is not only used for home entertainment, but can also be implemented as a mobilization and habilitation tool for the elderly or as an exercise machine (Figure 14).

Figure 14: Examples of How the Wii Can Be Used ("Wii-Fit-2.jpg," n.d;"wiiNTI1309," n.d.)

Finally, on a reflective level, the Wii comes with a fun factor. It's a social gaming experience for the whole family, no matter what age or gender.

Potential Wii users will still most likely first experience the visceral attributes of the product; however, in contrast to potential buyers of a fast moving consumer product like Coca Cola Zero, they will be able to try the product before buying it. Therefore the net emotional effect of the experience, which determines whether the customer accepts a product, will be based on different triggers. The "emotional scorecard" below summarizes a theoretical Nintendo Wii user experience.

Table 6: Wii Emotional Drivers

Emotion	**Emotional Drivers**	**Value**
Excitement/thrills	Variety of use, ease of use	Positive
Pleasure	Size, Shape, Color, Ease of use, variety of use	Positive
Comfort	Ease of use	Positive or Negative
Worry	Cost	Negative
Pride	Brand reputation, Fun factor, being part of the Wii family	Positive
Nostalgia	Brand heritage (Nintendo Entertainment System)	Positive
Trust	Brand credibility, dealer network, user community	Positive
Individuality	Custom color, accessories	Positive
	Net Emotional Effect:	**Positive**

Again, the overall net emotional effect in this case is positive; however it may vary from customer to customer. The only negative values in this example might result from costs and ease of use might result in a positive or negative value. Some people value ease of use, for others the product might be too simple, which can be viewed negatively.

4.3 Harley-Davidson

Harley-Davidson is an American motorcycle manufacturer which was established in 1903. Few brands today are as synonymous with a culture and lifestyle as Harley. Harley-Davidson motorcycles have a distinctive appearance. They are carefully designed to reflect the image of the brand. A hallmark of the brand is nostalgia. Harley-Davidson motorcycles have a retro "true to roots" styling theme which has been maintained over the years, even at times when trends or technological advances have called for change. For example, Harley's distinctive "choppy" engine sound is the result of an engineering trade-off from years ago. Today, there's no technical reason why the trade-off is needed, but the original design has been maintained. Harley-Davidson designers recognized that the user community derived visceral (raw sound) and reflective (unique) value from the engine sound.

A large user community and culture has evolved around the brand over the years. This is in part due to Harley's history of involving the user community. Harley riders think of themselves as co-producers of the brand with a strong say in the design of future products, accessories, and services (Berthon, Holbrook, Hulburt, & Pitt, 2007). The Harley-Davidson web site proclaims that "We like to think of Harley-Davidson – from the top corporate officer to the newest Harley owner and rider – as one big, happy family. The Harley Owners Group helps us turn that philosophy into reality."

The Harley Owners Group (HOG) is sponsored and operated by Harley-Davidson and today has over one million members. It serves not only to promote the brand, but also to build and maintain an involved user community and the Harley-Davidson lifestyle. (Denove & Power IV, 2007). It's also responsible for new revenue streams from the sale of official accessories and merchandise. In fact, Harley-Davidson licensed (non-motorcycle) merchandise accounts for 6% of the company's revenue according to 2008 financial statements. HOG members typically spend 30% more than other Harley owners, on such items as clothing and Harley-Davidson-sponsored events (Clifton, Simmons, & Ahmad, 2004).

Harley-Davidson motorcycles are loaded with design cues. But it's the visceral and reflective experiences which make a Harley a Harley. The below table is not an exhaustive list of design attributes. And particularly in the reflective category, the importance of these values will vary across riders. One noticeable characteristic of this table is that the behavior cues are, for the most part, not unique to the Harley brand. These are cues generally common to any touring-class motorcycle.

Table 7: Harley Davidson Design Cues

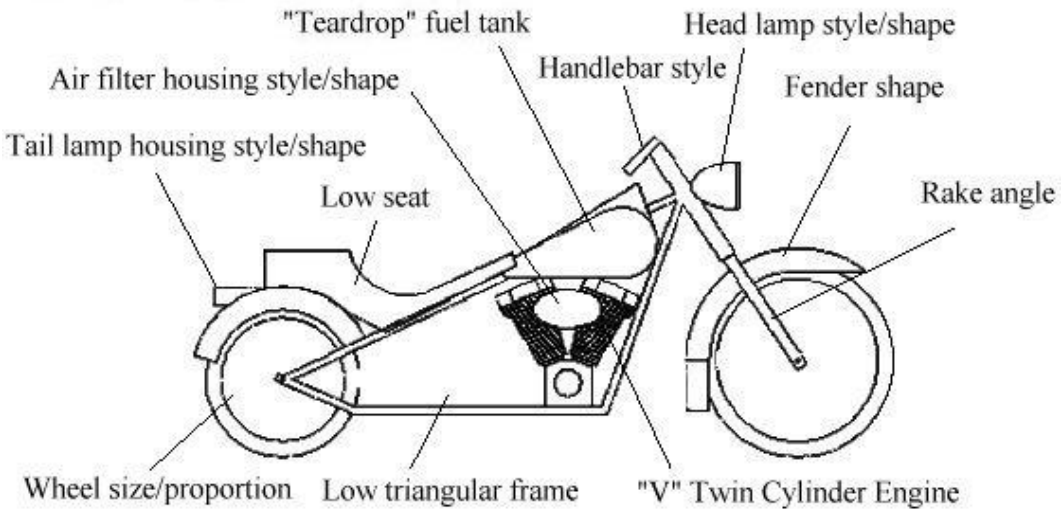
Visceral	**Behavioral**	**Reflective**
"Choppy" engine sound	Comfort seating	Harley community/culture
Distinctive exhaust note	Large fuel tank	"True to roots" retro styling
Chrome and leather	ABS braking	Authenticity
Finned V-Twin Engine	Cruise control	Freedom
Teardrop fuel tank	Low seat height	Pride of ownership
Distinctive fender design	Six-speed transmission	American made
Custom painting	Factory audio/navigation	HOG

Some features are offered as optional equipment and/or not available on all models.

The Harley-Davidson brand conjures up images of nostalgia, freedom, rebellion, and power. As the brand continues to evolve and new models are introduced, designers must find ways to keep the brand fresh and innovative, but while maintaining an appearance which supports the images of the brand. Pugliese and Cagan (2002) applied the concept of shape grammars to evaluate how the basic shapes and angles used in motorcycle design can create a brand association for users. When Harley-Davidson owners were presented with a series of basic schematic motorcycle illustrations, in 84% of the cases they were able to identify which diagram adhered to the Harley-Davidson rules of shape grammar (as defined by the authors after analyzing existing Harley-Davidson motorcycle models). This underscores the importance of recognizing and leveraging these themes in future product designs.

One of the correct models from this study is shown below (Figure 15). Descriptions have been added to call out some of the key shape and angle related design cues.

Figure 15: Prominent Physical Design Cues of the Harley-Davidson



Harley motorcycles are about form over function. To consider a contrasting example, BMW motorcycles are designed with function as the first priority. Designed for adventure touring, BMW cycles have features including under-seat fuel tanks (which lower the bike's center of gravity for more stable handling), "boxy" cargo cases (pure utility), greater use of (lightweight) plastics, and other styling cues which are driven by functionality. BMW's new high-performance bike (the S1000RR) has an asymmetrical design theme which is, again, influenced by functionality. While not all appreciate the appearance of BMW motorcycles, the behavioral-oriented rider values them for their light weight, utility, and performance. They couldn't care less about chrome or other purely aesthetic design cues. While focusing on very different design priorities, both Harley-Davidson and BMW each have very dedicated and enthusiastic user communities. Another trait these brands share is that each has a distinctive legacy and heritage in the motorcycle industry. They both leverage that history to build value based on reflective design.

Figure 16: Contrasts in Design – the Harley-Davidson Road King (left), and the BMW R1200 Adventure.

Harley-Davidson has been very successful leveraging both tangible and intangible design qualities to add value to their products and brand. There are many options available to someone who is considering purchasing a motorcycle. Other brands including Honda, Yamaha, and Moto Guzzi offer models which share the retro-cruiser design cues of the

Harley. Some competitive offerings (particularly from Japanese makers) are priced substantially lower than comparable models from Harley. While this makes owning a Harley more of a privilege, it also means a tougher sale to budget-conscious shoppers, regardless of how much they might covet the Harley. This is where the Theory of Planned Behavior can help Harley to close the sale. As prospective customers survey the market and interact with the riding community, they learn that Harley has tremendous strength in the domain of credibility; it's endorsed by the community at large as being "the real thing". Harley-Davidson also has an extensive dealer network which specializes in the brand. These dealers are highly involved with the local user community and strive for positive customer relationships. Harley has well-covered the brand attributes needed to support positive behavioral, normative, and control beliefs about the brand. These beliefs move the potential customer from awareness, to intention, to behavior: a test-ride.

At the showroom, the shopper will experience first-hand the visceral attributes which define the brand. Our model predicts that the net emotional effect of the product experience will determine whether the user embraces the product or brand. The below "emotional scorecard" summarizes a theoretical Harley-Davidson user experience. Of course, this experience will be unique for everyone.

Table 8: Harley-Davidson Emotional Drivers

Emotion	**Emotional Drivers**	**Value**
Excitement/thrills	Power/performance, handling, engine/exhaust sound	Positive or Negative
Pleasure	Shapes, styling cues, angles, chrome, leather	Positive
Fear	Power/performance	Positive or Negative
Comfort	Seating ergonomics, riding position	Positive
Safety	ABS braking, trust in brand (quality)	Positive
Worry	Cost, safety of use	Negative
Pride	Brand reputation, community, cultural associations, authenticity, American made	Positive
Nostalgia	Retro design, history of the brand	Positive
Trust	Brand credibility, dealer network, user community	Positive
Individuality	Custom painting, after-market accessories	Positive
	Net Emotional Effect:	**Positive**

The overall net emotional effect in this case (and presumably in the case of all Harley riders) is positive. As suggested above, even within a single emotional response, there's the possibility of both positive and negative reactions. For example, someone could be scared to death of skydiving, but also cite that fear as their primary motivation to practice the activity (thrill-seeking personality).

Nearly all of the triggers listed above are tied to visceral and reflective design cues, where Harley dominates. Other makes have not – in a compelling way – duplicated the visceral experience of listening to or riding a Harley. And no other make can duplicate what the Harley-Davidson brand stand for in terms of reflective values like authenticity, cultural association, and heritage. As a result, Harley-Davidson has captured and continues to maintain a dedicated, loyal, and enthusiastic user community.

4.4 Cadillac Cimarron

Cadillac, a division of General Motors (GM), has been a dominant manufacturer of luxury automobiles in the U.S. since the early 1900s. In its early years, Cadillac was known as an innovator. It produced the first closed-body car in America, sparking a trend of closed-bodied vehicles throughout the industry ("Cadillac Totally Explained," n.d.). For decades, Cadillac enjoyed an image of high quality and prestige. People were proud to drive them.

That all changed during the 1970s when quality issues, coupled with a gas crisis, drove Americans to choose smaller and more reliable Japanese cars, such as Toyotas and Datsuns. Sales across GM, including Cadillac, were in decline. Cadillac tried to respond to changing consumer demands by introducing a fuel-efficient diesel model, which, unfortunately, quickly earned a reputation for spotty performance ("Cadillac Overview," n.d.). Cadillac also ventured into smaller vehicles, such as the Seville, which was introduced in 1975 ("Cadillac Totally Explained," n.d.).

Still losing market share, Cadillac responded with the Cimarron, which was introduced in 1982 with the hope of attracting younger buyers. The Cimarron was built on GM's "J" platform. Numerous other GM vehicles shared this platform, including the lower-end Chevrolet Cavalier. GM had high expectations for this platform, expecting it to rival even expensive imports like BMW. Unfortunately, the Cimarron was rushed to production and shared many interior and exterior parts with its corporate relative, the Cavalier. Public reception reflected this. The Cimarron was widely considered to be a "warmed-over" Cavalier with an inflated price tag. Sales were dismal. GM expected to sell 75,000 Cimarrons during its first production year, but achieved barely 26,000 units. Despite efforts to improve styling, sales remained poor in subsequent years, and the Cimarron was discontinued in 1988, by which time annual sales had slumped to just 6,400 units (That Car Guy, 2009).

When Cadillac effectively slapped their badge on a Chevrolet, they were vastly overestimating how far that badge alone could carry their brand. Though the brand had suffered recent damage as a result of quality issues, it was still regarded as a luxury car, and a unique experience that was worth the price premium. But consumers quickly recognized that the Cimarron lacked the design cues of a true Cadillac, and they rejected it. Even when Cadillac tried to improve the luxury appointments of the Cimarron, the car was still shunned by car shoppers. The Cimarron was also crucified by the automotive press, which awarded it with such designations as one of the ugliest cars of the past 50 years.

Figure 17: The Cadillac Cimarron

**Source: Fifty Ugliest Cars of the Past 50 Years by Business Week ("Fifty Ugliest Cars of the Past 50 Years: Cadillac Cimarron," n.d.)*

The Cimarron's design caused major damage to the model's value – not to mention significant damage Cadillac's overall brand image. The below table summarizes some of the most egregious design miscues of the Cimarron.

Table 9: Cadillac Cimarron Design Cues

Visceral	**Behavioral**	**Reflective**
Appearance (ugly)	Weak engine sound	Not exclusive
Lackluster performance	Not luxurious	Not consistent with brand
Uninspiring design	Not advanced technically	
Cheap-feeling materials	Not a good value	

Luxury products must provide the right experience (Schmitt, 1998). Cadillac customers expected a rich-feeling interior, advanced safety options, and the best technology, not to mention many other qualities associated with luxury car brands that were absent in the Cimarron. Had the Cimarron been marketed as a Buick or Chevrolet, the experience may have been less severe. But being a Cadillac, the Cimarron entirely failed to deliver on consumer expectations, resulting in the negative emotional experience depicted below.

Table 10: Cadillac Cimarron Emotional Drivers

Emotion	**Emotional Drivers**	**Value**
Excitement/thrills	Ugly design, luxury design missing	Negative
Pleasure	Sound of engine bad, no luxury experience	Negative
Pride	Luxury factor missing	Negative
Nostalgia	Brand heritage	Positive
Trust	Brand credibility	Positive or Negative
	Net Emotional Effect:	**Negative**

Cadillac clearly missed the mark in all three design cue categories – but perhaps the most damage was done to the brand in the area of reflective attributes. It has taken Cadillac years to re-establish itself as a leading luxury make.

5.0 Conclusion

Intangible dimensions present a new ground for companies on which to compete. Winning in this domain not only requires superior design expertise, but also adequate psychological acumen to get into the mind of the customer. The theory of planned behavior is one of the many theories that provides a scientific basis for exploiting and influencing customer intentions and purchase preferences. The model introduced in this paper presents one way in which companies can apply knowledge, emotions, and experience on top of established psychological models, to better understand how customers are influenced by intangible dimensions. With these methodologies, companies can design products which deliver greater intangible value to the customer, thereby enabling them to outshine the competition.

The intangibility of dimensions, and the variations in the relative strengths of these relationships, creates a major challenge for designers to tailor approaches which create the desired responses in all of the dimensions. At this point, design cues play a crucial role. Design cues can act as a channel to target the different dimensions. Complex intangible

attributes can thus be translated into tangible ones which are easier to understand and communicate.

The Emotional Signature concept provides product designers with greater insight for how to advance customers through the emotional clusters, and gain a reasonable level of predictability over net emotions and how they influence perceived customer value and loyalty.

These tools alone do not represent an exhaustive solution for effectively solving the challenges associated with creating intangible product value. If it were that easy, this would not be a war worth waging. What's important is that these tools provide companies with an opportunity to consciously incorporate intangible design attributes into their front end processes. With these standard tools, it will no longer be a matter of chance when a company achieves success with intangible design elements. Intangible design is the next big step in successful branding. The winners in this game will create products which encapsulate several complex layers of value, making them difficult to replicate, and thus resulting in a sustained competitive advantage.

6.0 Future Research

While it's clear that relationships exist between the three intangible value dimensions of knowledge, emotion, and experience, the relative strengths of those relationships is often not as well understood. More research into where these influences are strongest (and weakest) would be of value. For example, we know that there are close ties between both emotion and knowledge, and emotion and experience. But which link is strongest? Are the relative strengths of these relationships variable across different product types? What about different products within the same product segment? There's also tremendous potential for research into the variation of these relationships across genders, cultures, age groups, and countless other demographics. As part of better understanding these relationships, a consistent measurement methodology will be important – albeit, potentially challenging to formulate. With consistent methodologies and benchmarks in place, the entire research community will be better enabled to share their findings and look for correlations, themes, as well as additional research opportunities.

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8.0 Appendix

8.1 Appendix A: Taxonomy of the Intangible Dimensions

Research Area Author (Year)	Experience	Emotion	Knowledge
Schmitt, B. (1999)	Sensory experiences (SENSE); affective experiences (FEEL); creative cognitive experiences (THINK): physical experiences, behaviors and lifestyles (ACT): and social-identity experiences that result from relating to a reference group or culture (RELATE).		
Keller (2001)			Brand awareness can be divided into two key dimensions: depth and breadth. Brand meaning is made up of two major categories of brand associations: Brand performance, Brand imagery
Desmet, P.M.A. (2003)		Types of Product Emotions: Surprise emotions, Instrumental emotions, aesthetic emotions, social emotions, interest emotions	

Forlizzi, J. (2004)	product-centered, user-centered, interaction-centered; user-product interactions (fluent, cognitive, expressive); dimensions of experience (experience, an experience and co-experience)	"Emotion is at the heart of any human experience and an essential component of user-product interactions and user experience." "Emotion serves as a resource for understanding and communicating about what we experience."	
Erdem, T. & Swait, J. (2004)			brand credibility; two sub-dimensions of brand credibility (trustworthiness and expertise).
Tiger, L. (1992) Helander, M.G. and Khalid, H.M.(2006)		Five types of product pleasure: Physical, Social, Psychological, Reflective, Normative	
Gentile, C. et al. (2007)	"temporal dimension which originates from the entire set of contact points (or moments of truth, Carlzon, 1987) between the customer and the company,"; personal dimension; engages a customer at different levels (rational, emotional, sensorial, physical and also "spirtual")		
Harmon, R. & Steiner, F. (2009)	Buying situation; personal experience; experience of others; status/prestige; loyalty/routine	Emotions towards the product; Emotions towards the supplier; Emotions towards personified brands; Emotions connected to memories/nostalgia	customer awareness; perceived expertise; trustworthiness/authenticity; recommendations/word of mouth
Verhoef, P.C. et al. (2009)	holistic in nature and involved customer's cognitive, affective, emotional, social and physical responses		customers' brand perceptions influence their experience and vice versa

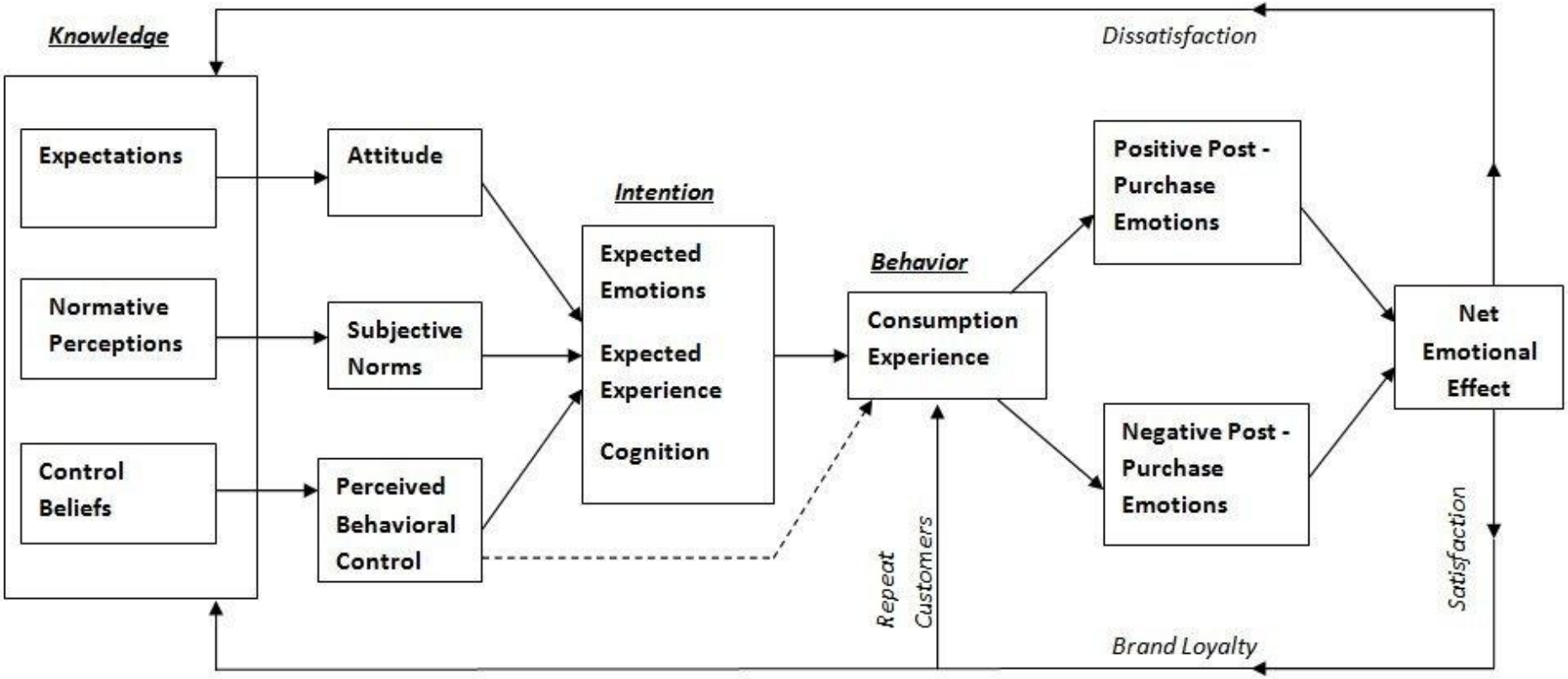
Lee, M. & Youn, S. (2009)			Word of mouth (WOM) – interpersonal communication about products and services between consumers – is one of the most influential sources of marketplace information for consumers (Arndt 1967; Alreck & Settle 1995). It is so influential because consumers generally trust peer consumers more than they trust advertisers or marketers (Blackshaw 2006; Sen & Lerman 2007).

8.2 Appendix B: Taxonomy of Dynamic Interaction of Intangible Dimensions

Emotion-Experience	Knowledge-Experience	Knowledge-Emotion	Knowledge-Emotion-Experience
Total Customer Experience (TCE) is a totally positive, engaging, enduring and socially fulfilling physical and emotional customer experience. Mascarenhas, O., Kesavan, R., & Bernacchi, M. (2006).	"We predict the experiences of using a product and the consequences of owning it. These anticipations are based on knowledge about the type of product or the product brand, and on information conveyed by the product itself" Desmet, P.M.A. (2003)	Love and respect for products are not always orthogonal. Increasing love is likely to increase respect, and similarly increasing respect is likely to increase love. Pawle,J., Cooper, P. (2006)	Properly executed experiences will encourage loyalty not only through a functional design but also by creating emotional connection through engaging, compelling, and consistent context. Pullman, M. E., Gross, M.A.(2004)
As time passes, the smallest experiences are forgotten, and only larger experiences, extremely emotional ones are remembered Forlizzi, J., Battarbee, K. (2004)		The relationship between design elements and loyalty behavior is strongly mediated by eliciting certain types of emotional behavior. Pullman, M. E., Gross, M.A.(2004)	Lasting Customer Loyalty (LCL) should be built through Total Customer Experience (TCE) by blending the physical, emotional and value elements of the target customers. Mascarenhas, O., Kesavan, R., & Bernacchi, M. (2006).
Each product interaction in an experience can be characterized by a particular fleeting emotional response, may coalesce into a particular emotional expression or mood, and is ultimately stored in memory as a particular aspect of an experience. Forlizzi, J., Battarbee, K. (2004)		When loyalty is supported by a favorable emotional experience or satisfaction, consumers are more likely to engage in positive word of mouth than in the absence of such an emotional experience or satisfaction. Dick, Basu (1994)	

Tangible attributes of a product or service have far less influence on consumer preference than the subconscious sensory and emotional elements derived from the total experience. Zaltman. (2003).		For a realistic answer to the question of how credibility can be increased, one has to return to the earlier analyses, where the distinction between cognitive and affective is crucial." "Positive evaluations are cognitive, the negative evaluations are affective." Maathuis, et al. (2004)	
Product experience is the entire set of affects that is elicited by the interaction between a user and a product, including the degree to which all our senses are gratified (aesthetic experience), the meanings we attach to the product (experience of meaning) and the feelings and emotions that are elicited (emotional experience) Hekkert. (2006).			

8.3 Appendix C: Product Value Model (enlarged)



8.4 Appendix D: The Power of Colors and Their Meanings

The power of color cannot be denied, more so as it is the soul instance of life on earth. There are many people who even dress according to days. Although sight and the human brain has helped in identifying colors and their delights, its interesting to note what colors mean to us in totality. A sampling of this understanding has been enlisted below:

Red
Excitement, energy, passion, desire, speed, strength, power, heat, love, aggression, danger, fire, blood, war, violence, aggression, all things intense and passionate.

Yellow
Joy, happiness, optimism, idealism, imagination, hope, sunshine, summer, gold, philosophy, dishonesty, cowardice, betrayal, jealousy, covetousness, deceit, illness, hazard.

Blue
Peace, tranquility, calm, stability, harmony, unity, trust, truth, confidence, conservatism, security, cleanliness, order, loyalty, sky, water, cold, technology, depression, appetite suppressant.

Orange
Energy, balance, warmth, enthusiasm, vibrant, expansive, flamboyant, demanding of attention.

Green
Nature, environment, healthy, good luck, renewal, youth, vigor, spring, generosity, fertility, jealousy, inexperience, envy, misfortune.

Purple
Royalty, spirituality, nobility, spirituality, ceremony, mysterious, transformation, wisdom, enlightenment, cruelty, arrogance, mourning.

Gray
Security, reliability, intelligence, staid, modesty, dignity, maturity, solid, conservative, practical, old age, sadness, boring.

Brown
Earth, hearth, home, outdoors, reliability, comfort, endurance, stability, simplicity, and comfort.

White
Reverence, purity, simplicity, cleanliness, peace, humility, precision, innocence, youth, birth, winter, snow, good, sterility, marriage (Western cultures), death (Eastern cultures), cold, clinical, sterile.

Black
Power, sexuality, sophistication, formality, elegance, wealth, mystery, fear, evil, anonymity, unhappiness, depth, style, evil, sadness, remorse, anger, underground, good technical color, mourning, death (Western cultures).

There are various cultures who understand the need of colors in their own special manner. Lets see how:

Red
China - symbol of celebration and luck, used in many cultural ceremonies that range from funerals to weddings.
India - color of purity (used in wedding outfits).
United States - Christmas color when combined with green, Valentines Day when combined with pink, indicates stop (danger) at traffic lights.
Eastern cultures - signifies joy when combined with white.

Yellow
Asia - sacred, imperial.
Western cultures - joy, happiness.

Blue
China - associated with immortality.
Colombia - associated with soap.
Hindus - the color of Krishna.
Jews - holiness.
Middle East - protective color.
* Note: Blue is often considered to be the safest global color.

Orange
Ireland - religious significance (Protestant).
United States - inexpensive goods, Halloween (with black).

Green
China - studies indicate this is not a good color choice for packaging, green hats mean a man's wife is cheating on him.
France - studies indicate this is not a good color choice for packaging.
India - the color of Islam.
Ireland - religious significance (Catholic).
Some tropical countries - associated with danger
United States - indicates go (safe) at traffic lights, environmental awareness, St. Patrick's Day, Christmas color (red and green).

Purple
Western cultures - royalty.

Brown
Colombia - discourages sales.

White
Eastern cultures - mourning, death.
Japan - white carnations signify death.
United States - purity (used in weddings).

Black
Western cultures - mourning, death.

Saffron
Hindu - sacred color. (orangish peach color)

Pastels
Korea - trust. United States - spring, Easter; pale blue (baby blue) stands for an infant boy; pale pink stands for an infant girl.