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## THE RELATIONSHIP BETWEEN AESTHETICS, PERCEIVED VALUE AND BUYING INTENTION: A LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

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### **ABSTRACT**

This research aims to synthesize the scales of aesthetics, the perceived value of the consumers for the intention to buy smartphones. At the same time, this analyzes the relationship between aesthetics, perceived value and intention to purchase, thereby the study suggests the research model which can be applied in other places, other contexts, and related fields. The method in this study is to summarize the systematics theories and compare the relevant studies. As a result, this research can develop research hypotheses. The main results of the proposed model are to explore the scales and find out the relationship between aesthetics, perceived value and intention to buy smartphones directly and indirectly. Moreover, empirical research can, based on the proposed conceptual framework, be studied for different countries or technology-related products such as computers, tablets, and other smart devices.



**Keywords:** Aesthetics; perceived value; functional value; emotional value; social value.



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## 1. INTRODUCTION

According to Nielsen Vietnam Report (2017), about the behavior of smartphone, the number of smartphone users compared to the number of regular phone users accounts for 84% in 2017; there is an increase of 6% compared to 2016 (78%). In secondary cities, 71% of people use smartphones in 93% of mobile phone users. More notably, in rural areas, while 89% of the population uses mobile phones, 68% of them own a smartphone. Through the above statistics, it can be seen that smartphones are no longer a new phenomenon for the Vietnam market.

The smartphone's hardware is gradually becoming saturated, and there is not much difference in the same price range, the external design will undoubtedly be one of the critical factors to impress, persuade users to make buying decisions. It can be said that the basic principles of aesthetics commonly used in the design of personal communication devices, entertainment and technology (SWILLEY, 2012; CHARTERS, 2006).

However, according to Toufani et al. (2017), the aesthetic factors of the product and the evaluation of the product's aesthetics may lead to unclear intentions to buy from individuals. Compared to the research on factors affecting the evaluation of the aesthetics of a product (HOYER; STOKBURGER-SAUER, 2012), studies on aesthetics can affect buying decisions are a few (TUREL et al., 2010).

Besides, smartphones are described as a cultural artifact and expanding the social relations of users (SHIN, 2012). Therefore, there is the debate that feeling interest and social practices are becoming more relevant to feel the usefulness in influencing the intention to buy (LIN; BHATTACHERJEE, 2010).

Moreover, the research results of Toufani et al. (2017) found that aesthetics has a direct effect on the intention to buy, but is weaker than the aesthetics affecting indirectly the intention to buy through perceived value. The reason is that the nature of digital products is the product that customers need to spend much time, cost and effort (LI; GERY, 2000), so they carefully evaluate the value that they can gain from the aesthetics of smartphones before they intend to buy.

It can be said that the aesthetics and perceived value of customers are increasingly concerned, leading to a high level of competition in the smartphone market. When the hardware war has almost no effect as before, the breakthrough design is vital for manufacturers to conquer consumers. In this situation, the aesthetic and perceived value measured from the



customer's point of view becomes essential to get a competitive advantage; and as a result, they increase the intention of purchasing potential customers.

Therefore, the study "The relationship between aesthetics, perceived value and buying intention: a literature review and conceptual framework" will help researchers understand the importance of factors affecting buying intention; from there, it is possible to conduct empirical research and provide practical solutions for consumer behavior.

## **2. LITERATURE REVIEW**

### **2.1. Aesthetics**

#### **2.1.1. *The concept of aesthetics***

Aesthetics can be narrowly defined as the theory of beauty, or more broadly, the philosophy of art. Previously, the philosophy of aesthetics was not recognized until the early eighteenth century, Alexander Gottlieb Baumgarten - "father of aesthetics" introduced the meaning of aesthetics terms, in his research, which is derived from the Greek *epistêmê aisthetikê*, is also known as the science of what is perceived and imagined - "The Science of Consciousness" (BAUMGARTEN, 1735). Besides, the Oxford dictionary translates that aesthetics is the nature of a thing related to beauty or beauty enhancement; brought or designed to create joy and satisfaction through superficial beauty.

The aesthetics of the product (such as design) can significantly affect consumer behavior (VERYZER, 1993). An eye-catching product is described as a communication thing between the designer and the consumer (KRIPPENDORFF; BUTTER, 1984; MONÖ, 1997; CRILLY et al., 2004).

Considering the way to approach eye-catching products in the form of text, the writer is the designer, and the reader is the consumer. Product designers are thought of in such a way as to evoke the relationship between the product and the consumer's intentions that may or may not correspond to their original intent to communicate. Also, aesthetics also refers to the concepts of harmony, beauty and order in the physical world (WHITE, 1996) with the evaluation of an object's aesthetics as a conscious perception (VERYZER, 1993).

Thus, it is not only about appearance, but aesthetics are also related to other senses (SWILLEY, 2012); these senses act as stimuli for both sensory and emotional reactions (WANG et al., 2013). Exploiting and digging into a person's aesthetic reaction (LANDWEHR et al., 2013) can assist in distinguishing products, creating product preferences.



According to Bloch et al. (2003) and Charters (2006), the aesthetic appeal of a product can vary from very high (sculptures or paintings) to very low (detergents). Visual aesthetics are reflected in many customer experiences, and the most notable is in fashion and art and unclear but also quite crucial in consumer electronic products such as personal computers, tablets, and smartphones (YAMAMOTO; LAMBERT, 1994).

Such products can be designed to meet the aesthetics both in appearance and touch (SWILLEY, 2012). Very few studies have been done on how aesthetics affect product purchases with both utilitarian and hedonistic attributes; these are valuable products in terms of the usefulness of the function as well as its emotional and social value (HOYER; STOKBURGER-SAUER, 2012).

In order to test the importance and impact of aesthetics on this product line, smartphones are used as a typical example, defined as "an equipped personal digital support phone." Integrated wireless connectivity and mobile devices and more likely (PARK; CHEN, 2007). Such a product can be observed both in terms of its utilitarian and attracting hedonistic attributes (BRUNNER et al., 2008; SWILLEY, 2012) and to reflect personal style and preferences of buyers (KATZ; SUGIYAMA, 2005; KATZ; SUGIYAMA, 2006).

In summary, the definition of aesthetics is as follows: "Aesthetics is the science of recognizing the beauty of each through experience with senses, self-perception about a specific product". Based on this definition, the study continues to explore and research the factors of aesthetics and the impact of these factors on consumer's intention to buy smartphones.

### **2.1.2. Properties of Aesthetics**

The aesthetic category has an extensive appearance; it reflects the general inherent in nature, society, material and spiritual. In the process of labor activities of society with the active participation of consciousness, people improve reality and the world around them. Mac et al. (1977) define that animals only mold and measure their species and that humans can produce by any measure and they can apply any metrics that are suitable for all subjects, so people can also mold materials according to the rules of beauty.

The above premise helps us understand more about the origin of aesthetics and beauty, and they always come from reality. Indeed, aesthetic factors are indispensable in all practical activities of people. The decision still does not exclude the meaning of using, and the intention to purchase such items is still in order to meet a specific practical purpose.



The aesthetic properties expressed as a principle that must necessarily take into account when building material values. Through studies of Swilley (2012) and previous studies (Wehmeyer, 2008; Cox and Cox, 2002; Bell et al., 1991), this paper uses the attributes listed in Table 1. to describe aesthetic attributes including color, design, overall appearance, feeling, material, beauty, and style.

Table 1: The properties of aesthetics

<b>Dimension</b>	<b>Items</b>
<b>Color</b>	1. Signals, such as colors strongly influence decisions to buy goods. 2. Consumer perception of an object can be revealed through their color choices. 3. Product colors can attract buyers and increase sales. 4. Aesthetics are affected by color. 5. The color of the product determines its quality.
<b>Design</b>	1. The design of a product is a competitive advantage and also a success factor in the market. 2. Design and aesthetics have a close relationship with each other.
<b>Overall appearance</b>	1. The appearance of the product attracts individuals. 2. The appearance of a product has a substantial impact on consumers' evaluation of the quality and function of that product.
<b>Touch/ Material</b>	1. Impact on the evaluation of retail products. 2. Touching may affect customers' buying decisions, even if there is no product description. 3. The material is vital in product evaluation. 4. Touching increases the information for purchasing decisions.
<b>Beauty</b>	1. Aesthetic value and utilitarian value, or beauty and use, need not be distinct.
<b>Style</b>	1. The ratio of the faces of a product that may affect the intention to buy, interest and it is related to market demand. 2. Product design can become a distinct advantage when it is suitable for cultural and social trends.

Sources: Bell et al. (1991), Cox and Cox (2002), Swilley (2012), Toufani et al. (2017) and Wehmeyer, (2008)

## 2.2. Buying intention

The intention to purchase can be defined as a pre-planned plan to purchase some goods or services in the future, which may not always lead to implementation because it is affected by performance (WARSHAW; DAVIS, 1985).

In other words, what consumers think will buy in their minds represents the intention to buy (BLACKWELL et al., 2001). Also, the intention to buy can also determine the ability to lead to the actual purchase of the customer, and through the determination of the intensity of the intention to buy, the ability to buy certain products will be stronger when intention to buy more strongly (DODDS et al., 1991; SCHIFFMAN; KANUK, 2000).

The intention to buy shows that consumers will follow the buying decision process: perceiving demand, seeking information, evaluating alternatives, purchasing decisions, and evaluating after purchasing (ZEITHAML, 1988; DODDS et al., 1991; SCHIFFMAN; KANUK, 2000).



Furthermore, the effort required to acquire smartphones and consumer understanding of the benefits of using smartphones is also two factors that have a significant effect on the intention to buy (IBRAHIM et al., 2013). Perceptual value is one of the factors that can stimulate the intention to buy; perceived value comes from relative advantages and product compatibility compared to the effort required to get a product. Efforts could be product prices and search times, leading to purchasing actions (MONROE; KRISHNAN, 1985; ZEITHAML, 1988).

Moreover, the intention to purchase can also be considered as a measure to predict consumer purchasing behavior (BONNIE et al., 2007). Besides, the intention to purchase is known as consumer trends for an audience; it is often measured by the intention to buy (KIM; KIM, 2004). The idea of purchasing intent for specific products or services is the final decision step in the decision-making process about buying intent, which is agreed by most previous researchers. (AGARWAL; TEAS, 2002; EREVELLES, 1993; FISHBEIN, 1967; HAN, 1990; PECOTICH et al., 1996).

Also, manufacturers are often interested in buying intentions because it can help them segment the market and, at the same time, support their decision-making as to where the product should be introduced (SEWALL, 1978; SILK; URBAN, 1978). Unlike that, the intention to purchase can be used to predict future demand (ARMSTRONG et al., 2000). Finally, there is a positive relationship between advantages, prices, social impacts and product compatibility to purchase (JONGEPIER et al., 2011; JUHA, 2008; YUE; STUART, 2011).

## **2.3. Perceived value**

### **2.3.1. Concepts of perceived value**

Scientific researchers have used many different terms to define the perceived value of customers such as perceived value, customer value, value for the customer, customer perceived value, perceived customer value, consumer value, consumption value,...

It should be noted that there is no clear definition of perceived value. The perceived value of customers varies depending on the business, customers and products or services that customers buy (BAKON; HASSAN, 2013). According to the original study of Zeithaml (1988): "Perceptual value is the overall consumer appreciation of the utility of a product or service based on their perception of what is received and what it must take out." Zeithaml (1988) also found that some consumers perceive value when products or services have low prices, while others perceive value when the product or service has a balance between quality



and price. It can be said that for different customers, the components of perceived value also differ (ASGARPOUR et al., 2015).

Also, Woodruff (1997) defines that customer perceived value as a customer's preference by evaluating product characteristics and efficiency from product use to achieving the customers' goals. This concept incorporates the desired value with the value received and emphasizes the value that comes from the customers' perception, love, and appreciation.

Besides, according to Turel et al. (2010), perceived value is also an important premise affecting consumers' intention to buy. The higher the perceived value, the stronger the intention to purchase (MONROE AND KRISHNAN, 1985). Sweeny and Soutar (2001) have identified three aspects of perceived value that are later widely used, namely functional value, social value, and emotional value. Similarly, Moliner et al. (2007) consider perceived value with the functional or quality value of products or services, social value or social impact and emotional value or personal experience.

In summary, although there are many different views of researchers about the relationship between perceived value and customer choice or intention to buy, in general, perceived value will affect customer behavior. In this study, the group applied three aspects of perceived value according to Sweeny and Soutar (2001). However, to better understand the perceived value of customer aesthetics, prices will be removed.

### **2.3.2. Dimension of perceived value**

Perceptual values are described in this study through three dimensions as follows:

#### **2.3.3. Functional value**

Functional values are related to the benefits associated with product ownership. According to Sheth et al. (1991), functional values are evaluated by reasons for the purchase and use of products based on the physical attributes and actual needs of users. Functional values are measured by a table describing the selected properties; in which reliability and durability are considered properties with functional values (SHETH et al., 1991).

Many studies explore how functional values affect consumers' intention to buy. Research by Johnston (2012) shows that battery life is essential to customers' intention to buy smartphones. In terms of durability and reliability, Karjaluoto et al. (2005) found a positive relationship between smartphone purchase and its reliability. Customers evaluate smartphone reliability based on fault and durability issues (SANDS; TSENG, 2010).



It means that durability and low error rates will enhance smartphone reliability thereby increasing functional value (BAKON; HASSAN, 2013). Also, Sweeny and Soutar (2001) consider performance or quality as a functional value of the product, and they define that the functional value is usefulness derived from perceived quality and expectations on product performance, such as durability and technical quality (FIOL et al., 2009; 2011). Lay Yee et al. (2013) also found that most smartphone users will consider the first product technology feature.

What is more, the study of Toufani et al. (2017) removed the possibility that functional values can increase social value and emotional value. To explain the relationship between these three values requires much more research. Besides, the smartphone technology features are increasingly standardized can explain the decline in the effect of functional values on intention to buy (KIM et al., 2013), especially when any smartphone has similar functions that may lead to more emphasis on other aspects of perceived value (TOUFANI et al., 2017).

Based on the analysis above, the smartphone manufacturers should study the features that meet the needs of customers, such as higher image resolution, better and faster-operating systems,... to improve revenue and profit.

#### **2.3.4. Social value**

Defined as a sense of usefulness from an individual's association with one or more specific social groups (SHETH et al., 1991), the social value can enhance individuals' value (SWEENEY; SOUTAR, 2001) based on the perception of social product assessment (FIOL et al., 2011). Customers may prefer to buy a product due to the social image that the product conveys (GIMPEL, 2011).

The most important social value that can be gained from buying and using smartphones is the transmission of images (BODKER et al., 2009). Some people believe that by possessing aesthetics products highly, they can improve their social relationships (HOLBROOK, 1999). According to Gimpel (2011), the decision to buy smartphones is significantly related to conveying the message that they are the leaders of the latest technology trends.

Research by You et al. (2011) also shows that there is a significant positive relationship between the decision to buy smartphones and social images. At the same time, customers feel the importance of buying new smartphones depending on the image. According to another study, 35.6% of 1814 respondents said that the trend in the community is one of the essential criteria affecting the decision to buy smartphones (OSMAN, 2012).



In the decision-making process, consumers tend to be always affected by social groups. Depending on different factors, consumers may listen and trust in different social groups, specifical experts in certain areas. According to Farzana (2012), purchasing behavior is shaped by others, especially by family members when purchasing products that consumers must carefully consider among many choices. Besides, social value also includes reflecting the personality and social status.

Bodker et al. (2009) found that many customers prefer to buy smartphones because it conveys their interests. Customers also buy smartphones because it is compatible with their lifestyle, working style and habits (KHAN; HYUNWOO, 2009). Some customers repurchase smartphones because they reflect the wealth and high social status (GIMPEL, 2011).

However, Jongepier's (2011) study showed the opposite, 77% of respondents disagreed or strongly disagreed with statements that people buy smartphones to impress others. Jongepier (2011) is also the one who discovered that 50% of customers do not think smartphones are a symbol of higher social status.

### **2.3.5. Emotional value**

Emotional value is a sense of usefulness from the ability of emotional arousal or emotional state (SHETH et al., 1991). The aesthetic characteristics of an object can create emotional reactions (FRIJDA; SCHRAM, 1995) with product design used as a way of attracting consumers' attention and providing products information and increasing the feelings of beauty (TRACTINSKY et al., 2000). Gimpel (2011) claims that aesthetics, such as beauty and art, can add to the emotional value of a product.

It can be said that the experience positively contributes emotional value to smartphone users. According to Sweeney and Soutar (2001), emotional value is the most critical predictor of purchase intentions and word of mouth behavior. Although consumers may not intentionally seek spiritual benefits when using them, positive emotions are unintentionally evoked from experience that plays a vital role in decision making at the next level. (SWEENEY; SOUTAR, 2001).

User experience is the most important factor for smartphone buyers (CLN, 2010); 94 % of customers buy and use smartphones because they enjoy using smartphones (Jongepier, 2011). If the user experience is positive and exciting, it will create an emotional attachment and positively affect the intention to buy smartphones (YOU et al., 2011). Also, many



customers buy the smartphone due to the comfort that they received from using it (KHAN; HYUNWOO, 2009).

Similarly, Gimpel (2011) shows that customers buy smartphones because of the convenience, excitement, and fun that it brings when they use it. Moreover, the design and aesthetics such as the beauty and artistry of smartphones increase the purchasing power of smartphones (BODKER et al., 2009; CROTHERS, 2011). Other research also shows that 24% of customers buy and use smartphones due to physical design (POWER; ASSOCIATES, 2012).

There are also many customers who decide to buy because their emotions rise when they appreciate the aesthetics of smartphones (GIMPEL, 2011). Finally, usefulness also creates emotional value through the use of smartphones. The properties function as external memory with the ability to store thousands of photos, GPS brings a sense of security, ... creates a feeling of familiarity for customers (GIMPEL, 2011).

For companies both large and small, when they sell products or services, they are mostly selling emotions to potential customers. Regardless of the type of product, over time, the subconscious of customers will form certain expectations about the product. Therefore, it is always necessary to create a new product design so that customers can always find products that are in tune with themselves emotionally.

**Table 2: Dimensions of Customers' Perceived Value**

<b>Variable</b>	<b>References</b>	<b>Scale Items</b>
<b>Functional value</b>	Sheth et al. (1991); Callarisa Fiol et al. (2009; 2011); Sweeny and Soutar (2001); Toufani et al. (2017); Bakon and Hassan (2013); Lay Yee et al. (2013)	1. Reliability 2. Durability 3. Good function
<b>Social value</b>	Sheth et al. (1991); Sweeney and Soutar (2001); Toufani et al. (2017); Bodker et al. (2009); Gimpel (2011); Farzana (2012)	1. Recognizing social approval from others 2. Improve a person's perception 3. Make a good impression on others 4. Many people I know buy these products
<b>Emotional value</b>	Sheth et al. (1991); Sweeney and Soutar (2001); Toufani et al. (2017); Gimpel (2011); Bodker et al. (2009); Crothers (2011)	1. Give me a feeling of happiness 2. Give me a sense of pride 3. Feel good when having a product with a premium design 4. Beautiful design helps our world become a better place to live

### **3. HYPOTHESES DEVELOPMENT**

Figure 1 describes an object's aesthetic connection with different sensing values, and these values continue to affect the intention to buy smartphones. The multi-dimensional model of perceived value is chosen because in some cases, the perceived usefulness or perceived



function may be less relevant when the technology products have strong emotional attractions. (TUREL et al., 2010). Therefore, the multi-dimensional approach about sensory value can capture the perception of both the value of the feature and the emotional value of an object.

Recognizing the aesthetics becomes more and more important in consumer marketing, Wang et al. (2013) suggested that the aesthetic factors that are visual stimuli affect behavior reactions via SOR model (Stimulus - Organism - Response), these stimuli evoke both cognitive and emotional behavioral responses (JACOBY, 2002). Cue theory (RICHARDSON et al., 1994; LEE; LOU, 1995; LEE; LOU, 1996) confirmed the influence of these stimulating factors on consumer perceived values and the product is described as a series of external and internal signals.

While external signals related to attributes that are not part of the physical product (such as brand name, packaging, and price), internal signals are associated with inherent properties of a product (such as its material, design, and appearance) and they have a close relationship with the product's aesthetic assessment and can increase consumer perceived value for the product.

In order to determine whether aesthetics can affect a buyer's decision through three different aspects of perceived value, it is necessary to check whether each aspect influences the intention to purchase, due to that perceived value cannot be considered a quadratic scale consisting of three aspects. Some studies confirm that consumer perceived value has a direct impact on buying intent or willingness to buy, for both products and services (CHEN; DUBINSKY, 2003; ASHTON et al., 2010; LEELAKULTHANT; HONGCHARU, 2012).

Although this is the expected direction, aesthetic principles are used in designing new technology products; the goal is to satisfy customers directly through the experience of beauty and appearance (Kumar and Garg, 2010). As a result, there is the possibility that aesthetics can create a positive feeling directly leading to the intention of the buyer to purchase the product.

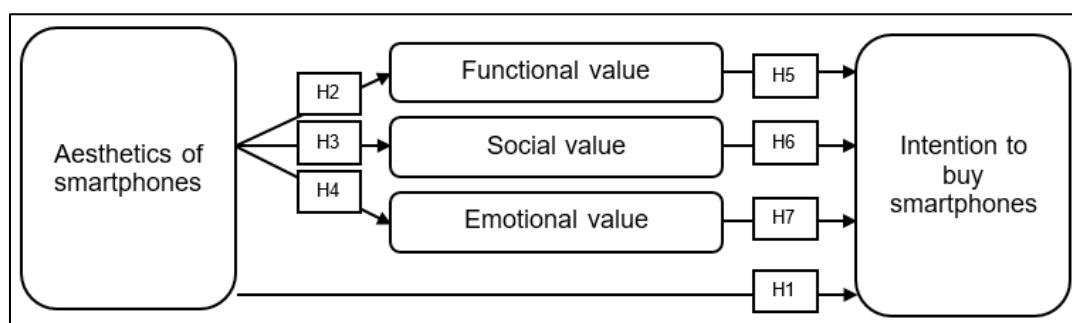


Figure 1: Proposal conceptual model

Aesthetics can directly or indirectly affect the intention to purchase (TOUFANI et al., 2017). Aesthetics can indirectly link to the intention of purchasing goods through factors that determine the adoption of technology (VAN; HEIJDEN, 2003). As an aspect of overall value, Turel et al. (2010) show that the indirect linkages of aesthetics intended to use virtual artifacts such as ringtones. Gallarza and Gil Saura (2006) applied aesthetics to understand how it affects satisfaction and intention to purchase in tourism. Aesthetics are also used to measure its impact on customer decisions when shopping online (MATHWICK et al., 2001). Also, aesthetics are directly related to purchasing intentions (LEE; KOOBEK, 2010; TZOU; LU, 2009). Therefore, hypothesis H1 is:

- ***H1: Aesthetics has a positive effect directly on intention to buy smartphones.***

Contrary to the aesthetics view that may hinder usefulness, Tractinsky et al. (2000) argue that the sense of beauty affects the sense of usefulness and Tractinsky (2004) claims to have set “a beautiful phrase” that can be used to confirm Tractinsky et al. (2000)’s research. Similarly, Shin (2012) argues that usefulness and aesthetics are interdependent, the research finds that customers feel the more beautiful smartphones, the more useful than devices with higher performance but lower aesthetics.

Aesthetics affected consumer decisions through functional attributes of products in different information system contexts such as using websites (HEIJDEN, 2003), the interaction between people - computers (TUCH et al., 2012) and mobile commerce (CYR et al., 2006). Although customers can assume that products with attractive designs have superior functions (CHAIKEN; MAHESWARAN, 1994), there are very few studies in the field of mobile devices that study the relationship between aesthetics and functional properties (SHIN, 2012) to validate the influence of aesthetics on functional values. Therefore, hypothesis H2 is:

- ***H2: Aesthetics has a positive effect on the functional value of smartphones.***

According to consumer value theory of Sheth et al. (1991), social value is choosing images with clearly visible products such as clothing, cars, and jewelry, ... Those things towards their image. An evaluation of an object's aesthetics can be made through interaction with society (LEDER et al., 2004). In other words, the satisfaction of aesthetics affects social value (MORTON et al., 2013). Therefore, hypothesis H3 is:

- ***H3: Aesthetics has a positive effect on the social value of smartphones.***

The aesthetic characteristics of a product can stimulate positive emotional reactions that lead to an emotional connection (SÁNCHEZ-FERNÁNDEZ; INIESTA-BONILLO, 2007; NANDA et al., 2008). Emotional values can become popular among individuals who value beauty because the beauty of an object can convey the feeling that they can meet their needs (HOLBROOK, 1999). Therefore, hypothesis H4 is:

- **H4: Aesthetics has a positive effect on the emotional value of smartphones.**

Functional values relate to consumer perception of the quality and function of products or services (YANG; JOLLY, 2009; CALLARISA et al., 2011). There is support for consumers' perception (CALLARISA et al., 2009) on functional values that have a strongly positive relationship with the intention to purchase (BHASKARAN; SUKUMARAN, 2007) and the use of a product (BUTLER et al., 2016). According to Sheth et al. (1991), consumer choice is a function of many independent consumer values, including functional values. Therefore, the hypothesis H5 is:

- **H5: The functional value has a positive effect on the intention to buy smartphones.**

Social values derive from a product's ability to reinforce the social concept (SWEENEY; SOUTAR, 2001). People often prefer to buy products that are accepted by social groups or follow social rules (WANG, 2010; LEE, 2014). A positive sense of social value leads to stronger purchasing intentions (VIGNERON; JOHNSON, 1999; KIM et al., 2013). While many studies have examined the role of social value in purchasing decisions (SWEENEY; SOUTAR, 2001; CALLARISA et al., 2009), there has been little research to find out whether the target has aesthetics can create a sense that it has social value and then will affect the decision to purchase. Therefore, the hypothesis H6 is:

- **H6: Social value has a positive effect on the intention to buy smartphones.**

Emotional value has been identified as an essential influence when purchasing goods (HEIJDEN, 2003). The more positive in the emotion, the more likely it is that the intention to purchase will happen (TZOU; LU, 2009). An attractive aesthetic audience that can create emotional values, and an emotional connection with a product (LEE; KOOBEK, 2010) can lead to purchasing intentions (HSIAO, 2013). Therefore, the hypothesis H7 is:

- **H7: Emotional value has a positive effect on the intention to buy smartphones.**

#### **4. CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH**



The current research on products in Vietnam is still very new. Especially in the field of advanced technology in general and in the field of smartphones in particular. Currently, the phone market in Vietnam is very diverse, and smartphones come from many different brands such as Apple, Samsung, Nokia, Sony, HTC, Oppo, LG, Asus, Lenovo, ... with the variety of designs and full of features. Therefore, this study explores what factors affect the intention to buy smartphones of customers. Since then, businesses and marketers can focus on improving products and attracting customers to achieve more business benefits.

Therefore, this research contributed in turn to study the theory as well as proposed models to find the factors affecting the intention to buy smartphones in Vietnam. Besides, the study also builds, synthesizes and develops to improve the scales that affect the intention to purchase smartphones. Through theoretical research, this paper proposes the relationship between aesthetics and the intention to buy smartphones directly. At the same time, this research also compares the indirect relationship between aesthetics and the intention to buy smartphones through the perceived value of customers.

The next step after developing hypotheses and modeling is to test hypotheses in the context of Vietnam. Factors affecting the intention to buy smartphones will be analyzed in detail in the study in Vietnam. The model in this study is the model applied in Vietnam, and this model will set the stage for other studies in Vietnam in general and in the world in the study of aesthetic factors and perceived value.

At the same time, this study further supports the theory for aesthetics, intention to buy products, perceived value, functional value, emotional value, and social value. Also, the model in the study provides other researchers to conduct empirical studies in many different research contexts. Based on the next empirical studies in the future, the company will know the direct effect of aesthetics or the indirect effect of aesthetics on intention to buy smartphones via the functional value, social value and emotional value.

## REFERENCES

- AGARWAL, S.; TEAS, R. K. (2002) Cross-national applicability of a perceived quality model. **Journal of Product & Brand Management**, v. 11, n. 4, p. 213-236.
- ARMSTRONG, J. S.; MORWITZ, V. G.; KUMAR, V. (2000) Sales forecasts for existing consumer products and services: Do purchase intentions contribute to accuracy. **International Journal of Forecasting**, v. 16, n. 3, p. 383-397.
- ASGARPOUR, R.; ABU, B. A.; HAMID; SULAIMAN Z. B. (2015) A Review on Customer Perceived Value and Its Main Components. **Global Journal of Business and Social Science Review**, v. 1, n. 2, p. 632-640.



ASHTON, A. S.; SCOTT, N.; SOLNET, D.; BREAKY, N. (2010) Hotel restaurant dining: the relationship between perceived value and intention to purchase. **Tourism and Hospitality Research**, v.10, n. 3, p. 206-218.

BAKON, K. A.; HASSAN, Z. (2013) Perceived Value of Smartphone and Its Impact on Deviant Behaviour: An Investigation on Higher Education Students in Malaysia.

**International Journal of Information Systems and Engineering**, v. 2, n. 1, p. 38-55.

BAUMGARTEN, A. G. (1735) *Aesthetica/Ästhetik*. edited by Dagmar Mirbach, 2 vols. (Hamburg: Felix Meiner Verlag, 2007); partial translation in Alexander Gottlieb Baumgarten and Hans Rudolf Schweizer, **Ästhetik als Philosophie der sinnlichen Erkenntnis: Eine Interpretation der "Aesthetica" A.G. Baumgartens mit teilweiser Wiedergabe der lateinischen Textes und deutscher Übersetzung** (Basel: Schwabe, 1973)

BELL, S. S.; HOLBROOK, M. B.; SOLOMON, M. R. (1991) Combining esthetic and social value to explain preferences for product styles with the incorporation of personality and ensemble effects. **Journal of Social Behavior & Personality**, v. 6, n. 6, p. 243-274.

BHASKARAN, S.; SUKUMARAN, N. (2007) Contextual and methodological issues in COO studies. **Marketing Intelligence & Planning**, v. 25, n. 1, p. 66-81.

BLACKWELL, R. D.; MINIARD, P. W.; ENGEL, J. F. (2001) **Consumer behavior 9th**. Mason, Ohio: South-Western.

BLOCH, P. H.; BRUNEL, F. F.; ARNOLD, T. J. (2003) Individual differences in the centrality of visual product aesthetics: Concept and measurement. **Journal of Consumer Research**, v. 29, n. 4, p. 551-565.

BODKER, M.; GIMPEL, G.; HEDMAN, J. (2009) **The user experience of Smart Phones: A consumption value approach**. Retrieved from <http://technologydiffusion.com/User%20Experience%20of%20Smart%20Phones.pdf>

BONNIE, D. B.; TERESA, A. S.; YINGJIAO, X.; RAUL, P. (2007) Theory of Reasoned Action Purchase Intention of Young Consumers. **Clothing and Textiles Research Journal**, v. 25, n. 3, p. 244-257.

BRUNNER, R.; EMERY, S.; HALL, R. (2008) **Do you matter?: how great design will make people love your company**. FT Press.

BUTLER, K.; GORDON, R.; ROGGEVEEN, K.; WAITT, G.; COOPER, P.; ZAINUDDIN, N. (2016) Social marketing and value in behaviour? Perceived value of using energy efficiently among low income older citizens. **Journal of Social Marketing**, v. 6, n. 2, p. 144-168.

CALLARISA F. L. J.; BIGNE ALCANIZ, E.; MOLINER TENA, M. A.; SÁNCHEZ GARCÍA, J. (2009) Customer loyalty in clusters: perceived value and satisfaction as antecedents. **Journal of Business-to- Business Marketing**, v. 16, n. 3, p. 276-316.

CALLARISA F. L. J.; MOLINER TENA, M. A.; SÁNCHEZ GARCÍA, J. (2011) Multidimensional perspective of perceived value in industrial clusters. **Journal of Business & Industrial Marketing**, v. 26, n. 2, p. 132-145.

CHAIKEN, S.; MAHESWARAN, D. (1994) Heuristic processing can bias systematic processing: effects of source credibility, argument ambiguity, and task importance on attitude judgment. **Journal of Personality and Social Psychology**, v. 66, n. 3, p. 460-473.

CHARTERS, S. (2006) Aesthetic Products and Aesthetic Consumption: A Review. **Consumption Markets & Culture**, v. 9, n. 3, p. 235-255.



CHEN, Z.; DUBINSKY, A. (2003) A conceptual model of perceived customer value in E-Commerce: a preliminary investigation. **Psychology & Marketing**, v. 24, n. 4, p. 323-347.

CLN (2010) **Smartphone market**. Retrieved from [http://www.clnonline.org/index.php?option=com\\_content&view=article&id=1341:smartphonemarket&catid=38:research&Itemid=100](http://www.clnonline.org/index.php?option=com_content&view=article&id=1341:smartphonemarket&catid=38:research&Itemid=100)

COX, D.; COX, A. D. (2002) Beyond first impressions: The effects of repeated exposure on consumer liking of visually complex and simple product designs. **Journal of the Academy of Marketing Science**, v. 30, n. 2, p. 119-130.

CRILLY, N.; MOULTRIE, J.; CLARKSON, P. J. (2004) Seeing things: consumer response to the visual domain in product design. **Design Studies**, v. 25, n. 6, p. 547-577.

CROTHERS, B (2011) **Apple, Samsung top J.D. Power satisfaction survey**. Retrieved from [http://news.cnet.com/8301-13924\\_3-20103501-64/apple-samsung-top-j.d-powersatisfaction-survey/?tag=mncol;txt](http://news.cnet.com/8301-13924_3-20103501-64/apple-samsung-top-j.d-powersatisfaction-survey/?tag=mncol;txt)

CYR, D.; HEAD, M.; IVANOV, A. (2006) Design aesthetics leading to m-loyalty in mobile commerce. **Information and Management**, v. 43, n. 8, p. 950-963.

DODDS, W. B. (1991) In Search of Value: How Price and Store Name Information Influence Buyers Product Perceptions. **The journal of services marketing**, v. 5, n. 3, p. 27-36.

EREVELLES, S. (1993) The price-warranty contract and product attitudes. **Journal of Business Research**, v. 27, n. 2, p. 171-181.

FARZANA, W. (2012) Consumers' psychological factors association with brand equity of high involvement product: Case of laptop. **World Journal Of Social Sciences**, v. 2, n. 5, p. 90-101.

FISHBEIN, M. (1967) Attitude and the prediction of behavior. Readings in attitude theory and measurement, p. 477-492.

FRIJDA, N.; SCHRAM, D. (1995) Introduction. **Poetics**, v. 23, n. 1-2, p. 1-6.

GALLARZA, M. G.; GIL SAURA, I. (2006) Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour. **Tourism Management**, v. 27, n. 3, p. 437-452.

GIMPEL, G. (2011) **Value-driven adoption and consumption of technology: Understanding**.

HAN, C. M. (1990) Testing the role of country image in consumer choice behaviour. **European Journal of Marketing**, v. 24, n. 6, p. 24-40.

HOLBROOK, M. B. (1999) **Consumer value: A framework for analysis and research**. Routledge, London.

HOYER, W.; STOKBURGER-SAUER, N. (2012) The role of aesthetic taste in consumer behavior. **Journal of the Academy of Marketing Science**. v. 40, n. 1, p. 167-180.

HSIAO, K-L (2013); **roid smartphone adoption and intention to pay for mobile internet: Perspectives from software, hardware, design, and value**. Library Hi Tech, v. 31, n. 2, p. 216-235.

IBRAHIM, I. I.; SUBARI, K. A.; KASSIM, K. M.; MOHAMOOD, S. K. B. (2013) Antecedent Stirring Purchase Intention of Smartphone among Adolescents in Perlis. **International Journal of Academic Research in Business and Social Sciences**, v. 3, n. 12, p. 84-97.



J. D. POWER AND ASSOCIATES (2012) **Press Release: 2012 U.S. wireless Smartphone and traditional mobile phone satisfaction studies.** Retrieved from <http://www.jdpower.com/content/press-release/py6kvam/2012-u-s-wireless-> International Journal of Information System and Engineering (IJISE) Volume 1, Issue 1, September 2013 ISSN: 2289-2265 54 smartphone-and-traditional-mobile-phone-satisfaction-study--v1.htm

JACOBY, J. (2002) Stimulus-organism-response reconsidered: an evolutionary step in modelling (consumer) behaviour. **Journal of Consumer Psychology**, v.12, n. 1, p. 51-57.

JOHNSTON, C. (2012) **Report: poor battery life in 4G Smartphones makes for unhappy customers.** Retrieved from <http://arstechnica.com/gadgets/news/2012/03/reportpoor-battery-life-in-4g-smartphones-makes-for-unhappy-customers.ars>

JONGEPIER, J. (2011) **Young adopter of Smartphones: Examining determinants of the adoption decisions.** Master Thesis, p. 1-77. Retrieved from <http://oaithesis.eur.nl/ir/repub/asset/10879/EUR%20Master%20Thesis%20JJongepier.pdf>

JUHA, M. (2008) Customers' purchase intentions as a reflection of price perception. **Journal of Product & Brand Management**, v. 17, n.3, p. 188-196.

KARJALUOTO, H.; KARVONEN, J.; KESTI, M.; (2005) Factors affecting consumer choice of mobile phones: Two studies from Finland. **Journal of Euromarketing**, v. 14, n. 3, p. 59-82.

KATZ, J. E.; SUGIYAMA, S. (2006) Mobile phones as fashion statements: evidence from student surveys in the US and Japan. **New Media & Society**, v. 8, n. 2, p. 321-337.

KATZ, J. E.; SUGIYAMA, S. (2005) The co-creation of mobile communications' public meaning in LING, R.; PEDERSEN, P. (eds.) **Mobile Communications, Re-negotiation of the Social Sphere**, p. 63-81, Springer, London.

KHAN, K.; HYUNWOO, K. (2009) **Factors affecting consumer resistance to innovation-A study of Smartphones.** Master Thesis, p. 1-68. Retrieved from <http://hj.divaportal.org/smash/get/diva2:223332/FULLTEXT02>

KIM, Y. H.; KIM, D. J. ; WACHTER, K. (2013) A study of mobile user engagement (MoEN): Engagement motivations, perceived value, satisfaction, and continued engagement intention. **Decision Support Systems**, v. 56, p. 361-70.

KIM, E. Y.; KIM, Y. K. (2004) Predicting online purchase intentions for clothing products. **European Journal of Marketing**, v. 38, n. 7, p. 883-897.

KRIPPENDORFF, K.; BUTTER, R. (1984) Product Semantics: Exploring the Symbolic Qualities of Form. **Innovation: The Journal of the Industrial Designers Society of America**, v. 3, n. 2, p. 4-9.

KUMAR, M.; GARG, N. (2010) Aesthetic principles and cognitive emotion appraisals: How much of the beauty lies in the eye of the beholder?. **Journal of Consumer Psychology**, v. 20, n. 4, p. 485-494.

LANDWEHR, J. R.; WENTZEL, D.; HERRMANN, A. (2013). Product Design for the Long Run: Consumer Responses to Typical and Atypical Designs at Different Stages of Exposure. **Journal of Marketing**, v. 77, n. 5, p. 92-107.

LAY YEE, K. L.; KOK SIEW, H.; YIN FAH, B. C. (2013) Factors affecting smartphone purchase decision among Malaysian generation Y. **International Journal of Asian Social Science**, v. 3, n. 12, p. 2426-2440.



LEDER, H.; BELKE1, B.; OEBERST, A.; AUGUSTIN, D. (2004) A model of aesthetic appreciation and aesthetic judgments. **British Journal of Psychology**, v. 95, n. 4, p. 489–508.

LEE, M.; LOU, Y.-C. (1995/1996) Consumer reliance on intrinsic and extrinsic cues in product evaluations: A conjoint approach. **Journal of Applied Business Research**, v. 12, n. 1, p. 21-28.

LEE, S.; KOUBEK, R. J. (2010) Understanding user preferences based on usability and aesthetics before and after actual use. **Interacting with Computers**, v. 22, n. 6, p. 530-43.

LEE, S. Y. (2014) Examining the factors that influence early adopters' smartphone adoption: The case of college students'. **Telematics and Informatics**, v. 31, n. 2, p. 308-318.

LEELAKUL THANIT, O.; HONGCHARU, B. (2012) Perceived customer value regarding eco-cars. **The Journal of Global Business Management**, v. 8, n. 1, p. 74-79.

LI, Z. G.; GERY, N. (2000) E-tailing—For all products?. **Business Horizons**, v. 43, n. 6, p. 49-54.

LIN, C-P.; BHATTACHERJEE, A. (2010) Extending technology usage models to interactive hedonic technologies: a theoretical model and empirical test. **Information Systems Journal**, v. 20, p. 163-181.

MATHWICK, C.; MALHOTRA, N.; RIGDON, E. (2001) Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment. **Journal of Retailing**, v. 77, n. 1, p. 39-56.

MOLINER, M. A.; SA'NCHEZ, J.; RODRÍGUEZ, R. M.; CALLARISA, L. (2007) Perceived relationship quality and post-purchase perceived value: An integrative framework. **European Journal of Marketing**. v. 41, n. 11/12, p. 1392-1422.

MONÖ, R. (1997) **Design for Product Understanding**. Liber, Stockholm, Sweden.

MONROE, K. B.; KRISHNAN, R. (1985) The effect of price on subjective product evaluations". **Perceived Quality**, v. 1, p. 209-232.

MONROE; KRISHNAN. (1985) **The effect of price on subjective product evaluations**, Lexington: Lexington Books.

MORTON, A.; RIVERS, C.; CHARTERS, S.; SPINKS, W. (2013) Champagne purchasing: the influence of kudos and sentimentality. **Qualitative Market Research: An International Journal**, v. 16, n. 2, p. 150-164.

NANDA, P.; BOS, J.; KRAMER, K.; HAY, K.; IGNACZ, J. (2008) Effect of smartphone aesthetic design on users' emotional reaction: An empirical study. **The TQM Journal**, v. 20, n. 4, p. 348-55.

NIELSEN (2017) **Nielsen Vietnam Smartphone Insight Report, Q4 – 2017**.

Retrieved from

[http://www.nielsen.com/content/dam/nielsenglobal/vn/docs/PR\\_EN/Web\\_Nielsen\\_Smartphones%20Insights\\_EN.pdf](http://www.nielsen.com/content/dam/nielsenglobal/vn/docs/PR_EN/Web_Nielsen_Smartphones%20Insights_EN.pdf)

OSMAN, M. (2012) A study of the trend of Smartphone and its usage behavior in Malaysia. **International Journal on New Computer Architectures and Their Applications**, v. 2, n. 1, p. 274-285.

PARK, Y.; CHEN, J. V. (2007) Acceptance and adoption of the innovative use of smartphone. **Industrial Management & Data Systems**, v. 107, n. 9, p. 1349-1365.



PECOTICH, A.; PRESSLEY, M.; ROTH, D. (1996) The impact of ethnocentrism on the origin effect in the service sector. **Journal of Retailing and Consumer Services**, v. 12, n. 4, p. 213-224.

RICHARDSON, P. DICK, A.; JAIN, A. (1994) Extrinsic and intrinsic cue effects on perceptions of store brand quality. **Journal of Marketing**, v. 58, n. 4, p. 28-36.

SÁNCHEZ-FERNÁNDEZ, R.; INIESTA-BONILLO, M. (2007) The concept of perceived value: a systematic review of the research. **Marketing Theory**, v. 7, n. 4, p. 427-51.

SAND, A.; TSENG, V. (2010) **Smart Phone reliability: Apple iPhones with fewest failures, and major Android manufactures not far behind.** p. 1-9. Retrieved from [http://www.wired.com/images\\_blogs/gadgetlab/2010/11/SquareTrade\\_Cell\\_Phone\\_Comparison\\_Study.pdf](http://www.wired.com/images_blogs/gadgetlab/2010/11/SquareTrade_Cell_Phone_Comparison_Study.pdf)

SCHIFFMAN, L. G.; KANUK, L. L. (2000) **Consumer Behavior (7th ed.)** Wisconsin: Prentice Hall.

SEWALL, M. A. (1978) Market segmentation based on consumer ratings of proposed product designs. **Journal of Marketing Research**, v. 15, n. 4, p. 557-564.

SHETH, J. N.; NEWMAN, B. I.; GROSS, B. L. (1991) Why we buy what we buy: A theory of consumption values. **Journal of Business Research**, v. 22, n. 2, p. 159-170.

SHIN, D-H. (2012) Cross-analysis of usability and aesthetic in smart devices: what influences users' preferences?. **Cross Cultural Management**, v. 19, n. 4, p. 563-587.

SILK, A. J.; URBAN, G. L. (1978) Pre-test-market evaluation of new packaged goods: A model and measurement methodology. **Journal of Marketing Research**, v. 15, n. 2, p. 171-191.

SWEENEY, J. C.; SOUTAR, G. N. (2001) Consumer perceived value: The development of a multiple item scale". **Journal of Retailing**, v. 77, n. 2, p. 203-220.

SWILLEY, E. (2012) Aesthetic technology: scale development and measurement. **International Journal of Technology Marketing**, v. 7, n. 3, p. 324-341.

TOUFANI, S.; STANTON, J. P.; CHIKWECHE, T. (2017) The importance of aesthetics on customers' intentions to purchase smartphones. **Marketing Intelligence & Planning**, v. 35, n. 3, p. 316-338.

TRACTINSKY, N.; KATZ, A. S.; IKAR, D. (2000) What is beautiful is usable. **Interacting with Computers**, v. 13, n. 2, p. 127-145.

TRACTINSKY, N. (2004) A few notes on the study of beauty in HCI. **Human-Computer Interaction**, v. 19, n. 4, p. 351-357.

TUCH, A. N.; ROTH, S. P.; HORNBÆK, K.; OPWIS, K.; BARGAS-AVILA, J. A. (2012) Is beautiful really usable? Toward understanding the relation between usability, aesthetics, and affect in HCI. **Computers in Human Behavior**, v. 28, n. 5, p. 1596-1607.

TUREL, O.; SERENKO, A.; BONTIS, N. (2010) User acceptance of hedonic digital artifacts: A theory of consumption values perspective. **Information & Management**, v. 47, n. 1, p. 53-59.

TZOU, R.-C.; LU, H.-P. (2009) Exploring the emotional, aesthetic, and ergonomic facets of innovative product on fashion technology acceptance model. **Behaviour & Information Technology**, v. 28, n. 4, p. 311-322.



VAN DER HEIJDEN, H. (2003) User Acceptance of Hedonic Information Systems. **MIS Quarterly**, v. 28, n. 4, p. 695-704.

VERYZER, R. W. (1993) Aesthetic response and the influence of design principles on product preferences. **Advances in Consumer Research**, v. 20, n. 1, p. 224-228.

VIGNERON, F.; JOHNSON, L. W. (1999) A review and a conceptual framework of prestige-seeking consumer behaviour. **Academy of Marketing Science Review**, v. 1, n. 1, p. 1-15.

WANG, Y.; CRUTHIRDS, K.; AXINN, C.; GUO, C. (2013) In search of aesthetics in consumer marketing: An examination of aesthetic stimuli from the Philosophy of Art and the Psychology of Art. **Academy of Marketing Studies Journal**, v. 17, n. 2, p. 37-55.

WANG, E. S. T. (2010) Impact of multiple perceived value on consumers' brand preference and purchase intention: a case of snack foods. **Journal of Food Products Marketing**, v. 16, n. 4, p. 386-397.

WARSHAW, P. R.; DAVIS, F. D. (1985) Disentangling behavioral intentions and behavioral expectations. **Journal of Experimental Social Psychology**, v. 21, n. 3, p. 213-228.

WEHMEYER, K. (2008) User-device attachment? scale development and initial test. **International Journal of Mobile Communications**, v. 6, n. 3, p. 280-295.

WHITE, D. A. (1996) It's Working Beautifully! Philosophical Reflections on Aesthetics and Organization Theory. **Journal of Organization**, v. 3, n. 2, p. 195–208.

WOODRUFF, R. B. (1997) Customer value: the next source for competitive advantage. **Journal of the Academy of Marketing Science**, v. 25, n. 2, p. 139-153.

YAMAMOTO, M.; LAMBERT, D. R. (1994) The impact of product aesthetics on the evaluation of industrial products. **Journal of Product Innovation Management**, v. 11, n. 4, p. 309-324.

YANG, K.; JOLLY, L. D. (2009) The effects of consumer perceived value and subjective norm on mobile data service adoption between American and Korean consumers. **Journal of Retailing and Consumer Services**, v. 16, n. 6, p. 502-508.

YOU, J. H.; LEE, J. H.; PARK, C. (2011) Factors affecting adoption and post-adoption of Smart Phone. **2011 International Conference on Software and Computer Applications**, v. 9, p. 108-112.

YUE, G.; STUART, J., B. (2011) Explaining purchasing behavior within World of Warcraft. **Journal of Computer Information Systems**, v. 52, n. 3, p. 18-30.

ZEITHAML, V. A. (1988) Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. **Journal of Marketing**, v. 52, p. 2-22.