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# Factors Influencing Customers' Loyalty: An Empirical Study for the Milk Industry in Vietnam

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## **Abstract**

*This study investigates the impact of brand awareness, brand image, and perceived value on customer loyalty within the milk industry in Vietnam. The research concentrates on renowned milk brands in Vietnam, such as Vinamilk, Dutch Lady, Nutifood, Nestle, TH true milk, Abbott, and Fami. The results from a sample of 141 respondents reveal that each of these factors positively influences customer loyalty. Notably, perceived value emerges as the most influential factor, with brand image and brand awareness following in strength. These findings offer valuable insights for professionals and researchers in related business domains.*

**Key words:** Brand awareness, Brand image, Perceived value, Customer loyalty, Milk industry.

JEL Classification: L81; M31; Q02

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## **1. Introduction**

Vietnam is an emerging economy with potential prospects, attracting a great deal of businesses, business practitioner and scholars (Dam & Huynh, 2022; Ho & Huynh, 2022; Nguyen & Huynh, 2022; Nguyen & Huynh, 2023; Phan & Huynh, 2023; Vo & Huynh, 2023). In particular, the milk industry in Vietnam has witnessed significant growth and competition with the presence of renowned brands such as Vinamilk, Dutch Lady, Nutifood, Nestle, TH true milk, Abbott, and Fami. The diverse range of milk brands available in the market offers consumers various options, leading to intensified competition among industry players. Meanwhile, consumer preferences and behaviors continue to evolve. Against this backdrop, establishing and maintaining customer loyalty has become a strategic imperative for milk brands. Recognizing the need for a comprehensive understanding of the factors influencing customer loyalty, this study focuses on the specific dynamics of brand awareness, brand image, and perceived value within the context of the Vietnamese milk industry, contributing valuable insights to industry practitioners and researchers.

The significance of the study lies in its potential to inform strategic decision-making for milk brands operating in Vietnam. By identifying the factors that most strongly influence customer loyalty, businesses can tailor their marketing and branding strategies to enhance customer retention. Moreover, this research contributes to the academic field by advancing our understanding of the relationships between brand-related factors and customer loyalty within the unique context of the Vietnamese milk industry.

In terms of theoretical contribution, this study enriches existing literature by offering empirical evidence specific to the Vietnamese milk industry. The findings of this research are expected to augment the theoretical foundations of brand management, marketing, and consumer behavior within the context of emerging markets.

Practically, the insights from this study hold the potential to guide marketing professionals, brand managers, and business leaders in formulating effective strategies to enhance customer loyalty. Understanding the relative impact of brand awareness, brand image, and perceived value allows businesses to allocate resources judiciously and tailor their efforts to maximize customer satisfaction and loyalty.

## **2. Literature review**

### ***2.1. Review of the previous studies/ theories***

#### *2.1.1 Overview of previous studies/ theories*

Keller (1993) defines Customer-Based Brand Equity as the different effects that knowledge about the brand has on customer's responses to marketing activities for the brand. Keller also mentions that Customer-Based Brand Equity involves how customers react to company's marketing mix action for a given brand, as compared to how they react if the same actions are attributed to the hypothetical or the unnamed version of the product or service. Customer-Based Brand Equity happens when the customers get used with the brand and hold some favorable, strong, and unique brand associations in memory (Keller, 1993).

As posited by Keller (1993, 1998), brand equity encompasses a customer's knowledge and comprises two fundamental components: Brand Image and Brand Awareness. Aaker (1996), in alignment with Keller, characterizes brand equity as a collection of brand assets and liabilities associated with a brand – encompassing its name, symbol, and slogan – that either enhances or diminishes the value delivered by a product or service to a firm or its customers. These assets and liabilities are intricately shaped by the four dimensions of brand equity: loyalty, perceived quality, associations, and awareness. In an alternative perspective, Netemeyer et al. (2004) delineate the core facets of customer-based brand equity (CBBE), defining a framework that incorporates perceived quality, perceived value for cost, uniqueness, and the inclination to pay a premium for a brand. Conversely, Aaker (1996) conceptualizes brand equity as comprising brand value and brand meaning. Brand meaning, in this context, involves brand salience, brand associations, and brand personality, while brand value results from the effective management of brand meaning. Keller (1993) also characterizes brand equity as the discernible impact of brand knowledge on consumer response to the brand's marketing efforts.

According to Lassar et al. (1995), brand equity holds great significance for marketers in the realm of consumer goods and services, playing a pivotal role in the success of brand extensions and introductions. Lassar et al. (1995) posit that consumers who possess trust and loyalty toward a brand are more open to exploring and adopting brand extensions. To capture this essence, he introduced the customer-based brand equity scale, constructed around five foundational dimensions: performance, value, social image, trustworthiness, and commitment. Lassar's

perspective leans towards perceptual dimensions, excluding behavioral or attitudinal aspects like usage intention or loyalty. In contrast to Lassar's approach, Aaker (1991) outlines the primary components of Customer-Based Brand Equity as Brand Loyalty, Brand Awareness, Perceived Quality, and Brand Image. The divergence in viewpoints emphasizes the multifaceted nature of brand equity and the various dimensions considered by scholars in defining and measuring its impact on consumer behavior and preferences.

With the diverse definitions of brand equity presented earlier, it becomes evident that brand equity is a complexed concept comprising numerous components, each potentially encompassing various sub-components. While there is a consensus among many authors regarding the inclusion of Brand Awareness and Perceived Quality in the realm of brand equity, there are still divergent perspectives on its constituent elements.

The consensus among various authors aligns on the presence of Brand Awareness and Perceived Quality as fundamental components of brand equity. However, differences arise in the viewpoints surrounding additional components. Lassar et al. (1995) posit that Perceived Value, Brand Trustworthiness, and Brand Commitment constitute additional dimensions within the framework of brand equity. In contrast, Aaker (1991) asserts that Brand Loyalty and Brand Image are integral components of brand equity. This divergence highlights the nuanced nature of brand equity, where scholars may emphasize different dimensions based on their conceptualizations and theoretical frameworks.

Consumer-based brand equity identification involves both an indirect and a direct approach, as outlined by Keller (1993). The direct approach, according to Keller, necessitates the measurement of Brand Awareness and the exploration of characteristics and relationships among brand associations. Brand Awareness can be effectively gauged through various aided and unaided memory measures, which assess brand recall and recognition. Qualitative techniques, such as free association tasks, projective techniques like sentence completion and picture interpretation, and brand personality descriptors, can be employed to measure brand associations. On the other hand, the indirect approach, as mentioned by Kim et al. (2003), involves experiments where one group of consumers responds to an element of the marketing program attributed to the brand, while another group responds to the same element attributed to a fictitiously named or unnamed version of the product or service.

Across different industries, the components of brand equity may vary. In the context of this research focusing on the milk industry, we anchor our understanding of brand equity on Aaker's defined components, widely accepted and utilized by numerous researchers (Keller, 1993; Low and Lamb, 2000; Prasad and Dev, 2000; Yoo et al., 2000). However, we propose the inclusion of an additional component, Brand Image, suggested by Aaker (1991, 1996), to provide a more comprehensive perspective on brand equity in the milk industry. Brand Loyalty is a component of Brand Equity but it seems to become the results of interrelationships among Brand Image, Brand Awareness and Perceived Value. Thus, we suggest that the Customer-Based Brand Equity's components for the case of the milk industry will consists of Brand Awareness, Brand Image and Perceived Value. Brand Loyalty will become the result of Customer-Based Brand Equity.

### *2.1.2 Fundamental concepts*

#### *2.1.2.1 Brand awareness*

Brand awareness is one of the main components of the brand equity (Aaker, 1991; Keller, 1998). According to Aaker (1991), brand awareness is the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category. Brand awareness consists of brand recognition and brand recall performance. First, brand recognition can be known as the customer's ability to confirm prior used to the brand when the brand is mentioned. In other words, the brand recognition requires customers can correctly discriminate the brand as having been previously seen or heard (Keller, 1998). Second, brand recall relates to customers' ability to restore the brand from memory when given the product category, the needs fulfilled by the category or a purchase or usage situation as a cue (Keller, 1998). Differing from brand recognition, brand recall requires that consumers correctly generate the brand from memory when they receive a relevant cue.

#### *2.1.2.2 Brand image*

Reynolds and Gutman (1984) have defined product imagery in terms of the stored meanings that an individual has in memory, suggesting that what is called up from memory provides the meaning we attribute most basically to image. Still others have talked about a product as having "personal" and "social" meanings, but have provided no general framework to explain how these are derived or what they intend. According to Dobni and Zinkhan (1990), the following emerge as the essential

structures of brand image: first, brand image is the concept of a brand that is held by the consumer; second, brand image is largely a subjective and perceptual phenomenon that is formed through consumer interpretation, whether reasoned or emotional; third, brand image is not inherent in the technical, functional or physical concerns of the product, rather, it is affected and molded by marketing activities, by context variables, and by the characteristics of the perceiver.

On the other way, Keller (1998) stated brand image is defined as perception about a brand as reflected by the brand associations held in consumer memory. Besides the sources of information, brand association can be created in a variety of different ways, such as by direct experiences, from the information communicated about the brand from the firms or other commercial, word of mouth and by assumption or interferences from the brand itself (name, logo and slogan) or from the identification of the brand with a company, country, channel of distribution or people, place and events.

#### 2.1.2.3 Perceived value

Perceived value is defined as a consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithaml, 1998). The value can be formed by functional utility and non-functional utility. The functional utility refers to tangible needs such as quality and price, while non-functional utility refers to intangible aspects related to reputation, social and emotional needs. This study focuses on two reflective components of perceived value when a consumer drink milk, namely emotional value and social value. First, emotional value is a social-psychological dimension that reflects a product's ability to interested feeling or affective feeling (Sheth et al., 1991). For example, when people drink beer, the emotional value represents the extent of pleasure, indulgence, and relaxation or cheer a consumer may feel while drinking it. Second, social value is defined as —the perceived utility acquired from an alternative's association with one or more specific social group (Sheth et al., 1991). Consumers chose a product to use and share with other people who usually drink milk are often driven by social value. Between the two components, the emotional value is to reflect the fulfillment of internal need for relaxation, provide essential nutrition, fun, etc. In contrast, the social value is associated with external need when consuming milk. It relates to the practice of social relationships with others like drinking milk, outside activity, improve health and connect family to family.

#### 2.1.2.4 Brand loyalty

Customer's loyalty means customers would like to tell their tendency of purchasing and using a product and repeated using that product, do not want to instead the other products (Chaudhuri, 1999). The definition of brand loyalty is a vital component of brand equity. It has been found to have a positive and direct role in affecting brand equity (Atilgan et al., 2005). According to Aaker (1991), brand loyalty is a basis of brand equity that is created by many factors. To Keller (1998), brand loyalty certainly seems to be a key variable for management interested in the value of brand equity when measure from a consumer perspective.

### **2.2. Hypothesis development**

#### *2.2.1 Brand awareness and brand loyalty*

Brand awareness is one of the main components of brand equity (Aaker, 1991; Keller, 1998). According to Aaker (1991), brand awareness is the ability of a potential buyer to recognize and recall that a brand is a member of a certain brand reflects the capability of recognizing and distinguishing characteristics of the brand among a set of various brands in the markets. To Aaker (1991), the loyalty is built based on the customers become aware of the product. The high level of brand awareness should increase the probability of the brand choice, as well as produce greater customer loyalty and decrease the competition in the market (Keller, 1993). When people decide to buy product, they will tend to repeat their business on the brand which they have used experiences with. Thus, we propose that:

**H1:** Brand Awareness has a significant positive impact on brand loyalty.

#### *2.2.2 Brand image and brand loyalty*

Brand image is reflected in the customer's memory. The more people aware of the brand, the more deeply the brand name will be stored in customer's mind. In addition, establishing and sustaining a positive brand image is one of the first steps in the maintaining customer brand loyalty process (Keller, 1998). To Andreassen and Lindestad (1998), the customer loyalty can be an extrinsic information cue for both existing and potential buyer and may or may not affect brand image. When customers feel brand more valuable and they have a good impression about its image, the perceived value from the customers view lead to the brand will increase and vice versa. Customers



are always be impressed in the first using of the product. In addition, brand image affects those around them and being in the minds of customers. Customers are willing to pay higher costs to buy a product under the brand that they are interested than the other brand. So, we assume that:

**H2:** Brand image has a significant impact on brand loyalty.

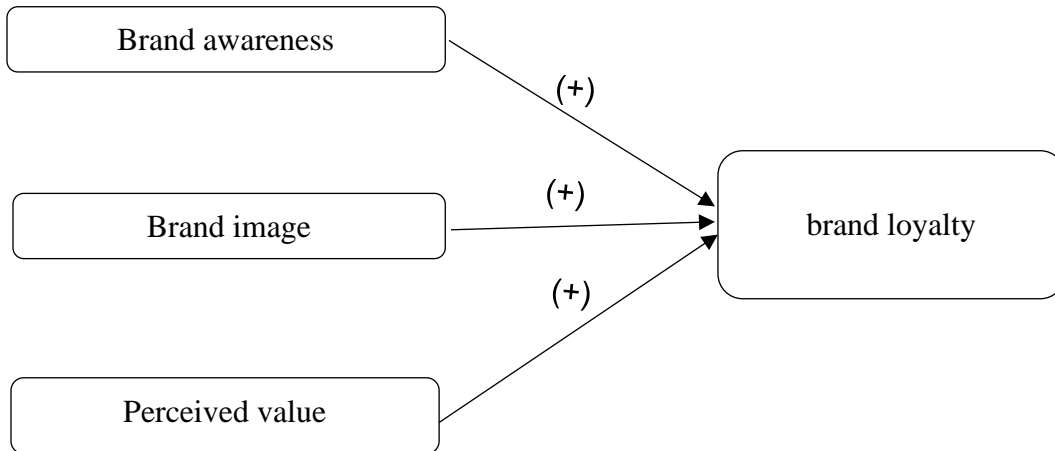
### 2.2.3 Perceived value and brand loyalty

People are willing to buy a product which they have a positive attitude towards its image. The marketing literature has established that the perceived value of a product/ brand leads to behavior intentions towards that product/brand (Williams and Soutar, 2009; Whittaker et al., 2007). In order to make the customers feel loyalty to a certain brand, that brand has to possess some characteristics which are different and able to create and maintain customer's affinity toward it. Therefore, the willingness of buying a product reflects the consumer's attitude towards buying milk is expected to strongly link with perceived value. Thus, we hypothesize that:

**H3:** Perceived value has a significant impact on brand loyalty.

### 2.3. Research framework

Based on the above arguments, we propose the research framework as follows:



**Figure 1.** Conceptual model.

### 3. Data and research methodology

The quantitative method is used in this study, which is based on a questionnaire survey and then analyzes to determine the effect of brand awareness, brand image and perceived value on brand loyalty in Vietnam. We use the convenience sampling method due to the easy accessibility and vicinity. Furthermore, this form of sampling approach has many advantages such as being simple, inexpensive, and straightforward, and frequently available.

We collect data from 141 people from major cities and provinces in Vietnam. We do the survey to collect data via both online Google Forms and offline face-to-face survey.

The survey questionnaire is divided into two main parts. The first part includes four demographic questions about gender, age, career and income. The second part includes 14 questions to measure dependent and independent variables. The level of agreement and disagreement is also evaluated using a seven-point Likert scale, with 1 denoting strongly disagreeing and 7 denoting strongly agreeing. Tables 1 and 2 show the survey questionnaire for dependent variable and independent variables, respectively.

Table 1. Dependent variable

<b>Brand Loyalty (BL)</b>			
<b>No</b>	<b>Code</b>	<b>Item Measurement</b>	<b>Source</b>
1	BL1	I used to buy the milk brand I like when I go to the super-market	Tho et al. (2002)
2	BL2	I have no any intention to change my milk brand I like	

3	BL3	I usually use the milk brand I like as a preferred choice	
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Table 2. Independent variables

No	Code	Item Measurement	Source
<b>Brand Awareness (BA)</b>			
1	BA1	I know clearly milk brand I like	Aaker (1996)
2	BA2	When talking about milk industry, I will remember the milk brand I like	
3	BA3	I can recognize the milk brand I like among the other milk brands	
4	BA4	I can distinguish the milk brand I like from the other milk brands	
<b>Brand Image (IC)</b>			
1	BI1	I always feel interested when introduce about the milk brand I like to friends	Aaker (1991), Keller (1993)
2	BI2	The milk brand I like has a clear image to me	
3	BI3	I think the milk brand I like has a strong position in the customer's mind in the market	

4	BI4	The milk brand I like is a lot of indent-income people choose to drink	
<b>Perceived Value (PV)</b>			
1	PV1	The milk brand I like is the kind of milk I often enjoy	Zeithaml (1998)
2	PV2	I always feel comfortable when drinking the milk brand I like	
3	PV3	The milk brand I like always gives me a sense of fun to drink	

## 4. Results and discussions

### 4.1. Reliability test

To ensure consistency and evaluate the measurement of dimensions within both independent and dependent variables, Cronbach's alpha will be utilized for a reliability test. A desirable correlation between measurements and variables typically falls within the range of 0.60 to 0.94 for alpha (Taber, 2018). Any measurement displaying an alpha value below 0.60 will be considered unreliable and subsequently eliminated. In addition, according to Field (2009), the values of Corrected Item-Total Correlation are the correlations between each item and the total score, and must be 0.3 or higher. The reliability test results for all variables are provided in Tables 3a-b, 4a-b, 5a-b, and 6a-b.

#### 4.1.1. Brand loyalty (BL)

Table 3a. Reliability Statistics for BL

Cronbach's Alpha	N of Items
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.882	3
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Table 3b. Item-Total Statistics for BL

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
BL1	18.53	13.836	0.663	0.455	0.872
BL2	18.57	17.087	0.640	0.415	0.855
BL3	18.69	14.016	0.620	0.406	0.866

The provided tables present the data pertaining to Cronbach's alpha and item-total statistics of operational performance. The results indicate that Cronbach's alpha coefficient (0.882) above the threshold of 0.6, suggesting a high level of internal consistency. Additionally, all items exhibit adjusted item-total correlations beyond 0.3, further supporting their reliability. Thus, the BL successfully fulfils the criterion of reliability testing, and no items have been excluded.

4.1.2. Brand Awareness (BA)

Table 4a. Reliability Statistics for BA

Cronbach's Alpha	N of Items
0.875	4

Table 4b. Item-Total Statistics for BA

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
BA1	15.99	13.190	0.616	0.513	0.864
BA2	15.90	13.289	0.598	0.490	0.868
BA3	15.05	12.720	0.671	0.602	0.851
BA4	14.94	12.936	0.605	0.502	0.857

The Cronbach's Alpha of CC is 0.875, higher than 0.6 and all the four items have the Corrected Item-Total Correlation bigger than 0.3. Therefore, the BA variables can be used in factor analysis.

#### 4.1.3. Brand Image (BI)

Table 5a. Reliability Statistics for BI

Cronbach's Alpha	N of Items
.889	5

Table 5b. Item-Total Statistics for BI

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
BI1	10.98	11.800	0.661	0.491	0.881

BI2	10.97	12.107	0.616	0.421	0.871
BI3	10.91	11.831	0.687	0.528	0.875
BI4	10.93	12.199	0.605	0.407	0.883

The Cronbach' Alpha of Delivery quality is 0.889, being higher than 0.6; and all the four items have the Corrected Item-Total Correlation bigger than 0.3. Therefore, the BI variables will be used in factor analysis.

#### 4.1.4. Perceived Value (PV)

Table 6a. Reliability Statistics for PV

Cronbach's Alpha	N of Items
.786	3

Table 6b: Item-Total Statistics for PV

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AC1	14.28	7.214	.671	.699
AC2	14.23	7.848	.577	.731
AC3	14.31	7.908	.634	.715

The Cronbach's Alpha of AC is 0.786 and bigger than 0.6. As well as all the three items of PV have bigger than 0.3, so all the items can be used in factor analysis.

#### 4.2. Exploratory Factor Analysis (EFA)

As outlined by Leech et al. (2005), researchers possess the flexibility to define the criterion for "high" loadings in Exploratory Factor Analysis (EFA) within a range spanning 0.30 to 0.50. In the present study, items with loadings equal to or surpassing 0.50 were selectively retained for analysis. Consequently, in the processing of data using SPSS, any factor loading exceeding 0.50 would be displayed in the output.

It is noteworthy, following Hair et al. (1995), that the removal of two adjacent factor loadings is considered permissible when the resulting value exceeds 0.3. Additionally, the appropriateness of factor analysis is evaluated using the KMO coefficient, necessitating a value within the range of 0.5 to 1 ( $0.5 < \text{KMO} < 1$ ). Pertaining to Bartlett's Test, it is crucial to observe that the significance level (Sig) should not surpass a specified threshold.

Taherdoost et al. (2014) emphasize that a significance level below 0.05 indicates statistical significance. Following Leech et al.' (2005), the Total Variation Explained table furnishes insights into the distribution of variation among potential causes. Each component must possess an eigenvalue equal to or exceeding 1; values below 1 are considered grounds for rejection. Furthermore, it is imperative that the cumulative percentage of variation reaches a minimum threshold of 50%. Given the nature of the study model aiming to scrutinize the mediation effect, it becomes necessary to incorporate all variables simultaneously in the exploratory factor analysis test.

##### 4.2.1. Dependent variable (Brand Loyalty)

Table 7a. KMO and Bartlett's Test for the dependent variable

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.617
Bartlett's Test of Sphericity	Approx. Chi-Square	84.041
	df	3
	Sig.	0.000

Based on the provided table, the KMO value is 0.617, exceeding the threshold of 0.5. Additionally, the Bartlett's Test of Sphericity (Sig.) yields a value of 0.000, indicating statistical significance below the 0.05 threshold. Consequently, the brand loyalty variable is deemed suitable



for exploration using factor analysis. This also implies that the items exhibit a correlation with one another within a certain factor.

Table 7b. Total Variance Explained for the dependent variable

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.887	62.911	62.911	1.887	62.911	62.911
2	.702	23.388	86.299			
3	.411	13.701	100.000			

Extraction Method: Principal Component Analysis.

There is over 1 component with Eigenvalues 1 and variance extracted is 62.911% which is higher than 50%. Therefore, the interpretation of factors is relatively good.

Table 7c. Component Matrix<sup>a</sup> for the dependent variable

<b>Component Matrix<sup>a</sup></b>	
	Component
	1
BL3	0.866
BL1	0.781
BL2	0.727
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

In Table 7c, 3 items are collected into 1 component, all the observed variables have Factor Loading coefficient greater than 0.5. Therefore, all items above used for measuring satisfaction are accepted and can be used for next steps.

#### 4.2.2. Independent variables (BA, BI, PV)

Table 8a. KMO and Bartlett's Test for Independent variables.

<b>KMO and Bartlett's Test</b>
--------------------------------

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.626
Bartlett's Test of Sphericity	Approx. Chi-Square	605.845
	df	28
	Sig.	0.000

It can be seen in Table 8a that the KMO value of independent variables is 0.626. In addition, the Sig value of Bartlett's test of Sphericity is 0.000 which is smaller than 0.05. Therefore, this outcome of the independent variables is appropriate for conducting EFA

Table 8b. Total Variance Explained Independent variables.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.301	41.262	41.262	3.301	41.262	41.262
2	1.640	20.506	61.768	1.640	20.506	61.768
3	1.102	13.772	75.540	1.102	13.772	75.540
4	.770	9.622	85.162			
5	.663	9.622	85.162			
6	.267	3.335	96.784			
7	.173	3.335	96.784			
8	.084	1.048	100.00			

*Extraction Method: Principal Component Analysis.*

The findings from the exploratory factor analysis (EFA) indicate that the first three components have Eigenvalues greater than 1, specifically at 8.170, 2.319, and 1.939, respectively. This pattern is consistent with the number of variables that were included in the study. Furthermore, it is worth noting that the Total Variance Explained exceeds the threshold of 50% (specifically, 70.272% > 50%), thus surpassing the prescribed standard and being deemed acceptable. Hence, it may be inferred that three distinct components account for a significant proportion of the overall variation, specifically 70.272%.

Table 8c. Rotated Component Matrix<sup>a</sup> for Independent variables

<b>Rotated Component Matrix<sup>a</sup></b>				
	Component			
	1	2	3	
BA1	0.831			
BA2	0.814			
BA3	0.782			
BA4	0.771			
BI3		0.822		
BI1		0.808		
BI2		0.767		
BI4		0.758		
PV3			0.819	
PV1			0.791	
PV2			0.785	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. <sup>a</sup>				
a. Rotation converged in 5 iterations.				

Table 8c shows that the loadings of all 19 items distributed across four components are greater than 0.5 (ranking from 0.758 to 0.831).

### **4.3. Regression**

We estimate the impact of three independent variables (BA, BI, PV) on the dependent variable (BL) by employing the Multiple linear regression. Results are presented in Tables 9, 10, and 11.

Table 9. Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.991 <sup>a</sup>	.982	.982	.07291	2.078
a. Predictors: (Constant), BA, BI, PV					
b. Dependent Variable: BL					

Regression model is created by three factors: BA, BI and PV. The Adjusted R Square is 0.982 meaning that there is 98.2 percent of the change of the dependent variable is explained by

four independent variables. The value of Durbin – Watson equals 2.078, in the range of 1.5 to 2.5, which means there is no auto-correlated problem in this statistical model.

Table 10. ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.208	3	13.403	2520.949	.000 <sup>b</sup>
	Residual	.728	137	0.005		
	Total	40.936	140			
a. Dependent Variable: BL						
b. Predictors: (Constant), BA, BI, PV						

In Table 10, the Sig value from the F-test indicates the sequence of independent variables significantly anticipates towards the dependent variable, in which, the Sig. must be less than 0.05 (Leech et al., 2005). As the table shown above, The ANOVA acquires an F-test value of 2520.949 and is significant ( $p < 0.001$ ). The results of this outcome demonstrate that the combination of the predictors dramatically predicts customer satisfaction.

Table 11. Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.219	.116		-3.885	0.001		
	BA	.004	.027	.303	3.140	.000	.601	1.663
	BI	.080	.019	.541	4.153	.000	.773	1.294
	PV	.948	.017	.971	16.263	.000	.773	1.293
a. Dependent Variable: BL								

Table 11 shows that the value of VIF of independent variables is smaller than 2 so there is no multicollinearity in the multiple linear regression model. As given in Table 11, the t value and the Sig. (p) of each independent variable indicates whether that variable is significantly contributing to the equation for predicting dependent variable from the whole set of predictors (Leech et al., 2005). According to Field (2009), when Sig. of one predictor is equal or less than 0.05, this predictor has a significant impact on the dependent variable. There are all three independent variables that have Sig. values satisfying the condition of less than 0.05. Therefore, these factors have significant influence on the BL. The findings can be seen as follows:

Hypothesis H1: BA has a significant positive impact on BL. This hypothesis is supported by correlation ( $\text{sig} = 0.000 < 0.05$ ) and multiple regression ( $\text{sig} = 0.000 < 0.05$ ) and beta coefficient (0.303). Thus, H1 is accepted and the result also shows that BA has a positive impact on BL

Hypothesis H2: BI has a significant positive impact on BL. This hypothesis is supported by correlation ( $\text{sig} = 0.000 < 0.05$ ) and multiple regression ( $\text{sig} = 0.001 < 0.05$ ) and beta coefficient (0.541). Thus, H2 is supported.

Hypothesis H3: PV has a significant positive impact on BL. This hypothesis is supported by correlation ( $\text{sig} = 0.000 < 0.05$ ) and multiple regression ( $\text{sig} = 0.011 < 0.05$ ) and beta coefficient (0.971). Thus, H3 is accepted and the result also shows that PV has a positive impact on BL.

Additionally, PV has the highest standardized coefficients Beta (0.971), which indicates that this predictor has the strongest impact on BL. Next, BI ranks second with  $\beta = 0.541$ . Following that are BA with  $\beta = 0.303$ .

#### ***4.4. Discussion***

The positive influence of brand awareness on customer loyalty aligns with established theories (Aaker, 1991; Keller, 1993, 1998). This result confirms the significance of creating and maintaining strong brand recognition in the competitive milk industry. The observed impact of brand awareness suggests that consumers are more likely to exhibit loyalty towards a brand they are familiar with, reinforcing the importance of marketing and promotional strategies.

Similarly, the positive correlation between brand image and customer loyalty is consistent with prior research (Andreassen and Lindestad, 1998; Keller, 1998). A positive brand image not only attracts customers but also fosters a sense of trust and credibility. The results suggest that

consumers in the milk industry consider the reputation and perception of a brand as influential factors in their loyalty decisions.

Perhaps the most significant finding of this study is the dominant role of perceived value in influencing customer loyalty. This result emphasizes that consumers in the milk industry in Vietnam prioritize the perceived benefits and value offered by a brand. Aspects such as quality, pricing, and overall satisfaction play a pivotal role in shaping customer loyalty. This emphasizes the importance of brands in the milk industry aligning their offerings with consumer expectations and delivering value beyond mere product attributes.

The hierarchy of influences, with perceived value emerging as the most influential factor, followed by brand image and brand awareness, provides valuable insights for practitioners. Focusing on enhancing perceived value can potentially yield the most significant impact on customer loyalty. However, a holistic approach that addresses all three factors is advisable for comprehensive brand management.

## **5. Conclusion and implication**

This study investigates the impact of brand awareness, brand image, and perceived value on customer loyalty within the milk industry in Vietnam. The research concentrates on renowned milk brands in Vietnam, such as Vinamilk, Dutch Lady, Nutifood, Nestle, TH true milk, Abbott, and Fami. The results from a sample of 141 respondents reveal that each of these factors positively influences customer loyalty. Notably, perceived value emerges as the most influential factor, with brand image and brand awareness following in strength.

These findings offer actionable insights for professionals in the milk industry, enabling them to refine their strategies for brand building and customer relationship management. Understanding the prominence of perceived value suggests that investments in product quality, pricing strategies, and customer satisfaction initiatives can yield substantial returns in terms of customer loyalty.

It is essential to acknowledge the limitations of this study, such as the sample size and geographical scope. Future research could expand the study to include a more diverse sample and explore additional factors that may influence customer loyalty in the milk industry. Exploring cultural nuances and external market dynamics could provide a more nuanced understanding of consumer behavior.

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