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Factors Influencing Purchase Intention of Vietnamese Adults: A Case Study of Dairy Products

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Abstract

Vietnam has become one of the largest markets in Southeast Asia, with huge demand for many kinds of consumer goods, including dairy products. Although the domestic industry of producing and distributing milk has flourished dramatically in recent years, Vietnam still heavily hinges on dairy imports. The total value of milk products in 2020 exceeded 1 billion USD, leading to Vietnam being one of the 20 biggest importers of dairy milk globally. To explore this potential industry, we applied a multivariate linear regression model to investigate the milk consumption behaviors of Vietnamese adults. 2000 participants took part in our survey in which the products evaluated were Dielac Alpha – the most famous national powdered milk introduced in 2007 by Vinamilk. This product was designed for all ages, from children aged 0–6 to pregnant women or adults. The results indicate that the decision to purchase milk could be attributed to a host of factors. While price represents the most strongly influential factor, there might be variations according to consumer characteristics, namely age, marriage status, gender, and particular shopping behavior. From these findings, we propose some managerial implications for regulatory bodies and relevant enterprises to prepare appropriate policies and strategies for their business development.

Keywords: Purchase Intention, Formula Milk, Vietnamese Adults, Empirical Study

JEL Classification Code: G32, G33, G39

1. Introduction

In this modern society, the demand for quality-of-life improvement is getting higher than ever. Health and human development are among those of people's greatest concerns (Dwidienawati et al., 2020). One of the products that are created to provide necessary nutrients for humans is milk (de Graaf et al., 2016). The use of milk from animals started from as far back as 9000–7000 BCE in Southwest Asia to 3500–3000 BC in the Americas (Ballard & Morrow, 2013). However, raw milk from animals is limited in nutritional value. The low value and difficult storage created from raw milk are why dairy manufacturers appeared – to produce higher quality milk with easier delivery and storage to meet

the soaring consumer demand (Haiden & Ziegler, 2016). Milk is loaded with nutrients beneficial for brain development, weight gain, height growth, immunity-boosting, rickets prevention, and human recovery (Palmeira & Carneiro-Sampaio, 2016). Besides valuable breast milk, a plethora of commercial milk nowadays brings great benefits based on a formula. Among different kinds of milk products, milk powder for babies has attracted the attention of many people because once the mother cannot breastfeed, formula milk could act as a safe alternative to ensure nutrition for the child (Ballard & Morrow, 2013).

The dairy industry takes the lead in the Vietnamese food and beverage industry; some statistical results show that per capita consumption of dairy products in Vietnam has increased to 18 liters/year (Nguyen, 2014). Under that circumstance, a Vietnamese dairy company Vinamilk made informed decisions to become the top dairy company in the Vietnamese dairy industry (Mansen et al., 2021). Dielac Alpha, a Vinamilk company product, has been invested with constant effort to stand in this competitive market. Vinamilk mainly manufactures and distributes dairy products such as fresh milk, condensed milk, powder milk, yogurt, cream, cheese, and other beverages like fruit juice and soya milk

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(Palmeira & Carneiro-Sampaio, 2016). According to Euromonitor, this company remained in the leading position in the Vietnamese dairy market for over three years, until December 2009. Since then, its annual revenue has reached 21% growth. In 2009, Vinamilk's total revenue reached its maximum value of 0.43 billion USD together with the biggest profit ever. The powdered milk Dielac Alpha was released into the market in 2007 (Mansen et al., 2021). Suitable for children aged 0–6 to pregnant women and adults, Dielac Alpha is amongst the highest quality milk brands for children in Vietnam.

The author took inspiration from this topic to carry out theoretical and empirical research about Vinamilk, a typical case of success among dairy companies in Vietnam. To clarify the problems related to quality, prestige, appropriation with the economy, service quality, brand interest, and convenience, the authors choose the research "Factors influencing consumers' purchase intention of Dielac Alpha." This study aims to examine the link between several determinants and the decision to purchase Dielac Alpha formula milk in parents who have kids. Based on collected data, we could identify important motives for buying milk beverages, which leads to viable solutions to help dairy firms improve sales performance and develop their business. At the same time, customers also have a chance to experience diverse products with superior quality. Hence, the research contributes to the current holistic literature review in two aspects: First, this study identifies potential driving factors and utilizes SPSS statistical software to analyze their impact on Dielac Alpha formula milk purchase decisions. Secondly, this study discusses several implications for management to accelerate customer purchase decisions.

2. Literature Review and Hypotheses

2.1. Literature Review

Customer behavior comprises a five-stage procedure: problem identification, information search, evaluation of alternatives, purchase decision, and post-purchase decision. It relates to several activities, such as evaluate, purchase, utilize and dispose of. All of them contain two stages: the decision-making process and actual buying actions. Similarly, Dwidienawati et al. (2020) argue that understanding customer behavior is very important for business management because it explains what a business should do to satisfy customer needs at three points: before, during, and after the purchase action (Ahmad & Zhang, 2020). These stages begin with investigating, followed by deciding to buy goods or services. After that, consumer behavior also includes usage periods and consumer feedback about products. Finally, the process ends when

products are out of order or expired to be eliminated (Ansar, 2013).

The study of consumer behavior is one of the most important issues marketers have to undertake to identify what drive customer to purchase or not to purchase a product or what should be done to improve customer experience. For example, Kotler (1965) developed a behavioral model to explore and understand the process by which customers decide to buy a product. He looks at their mind and tries to explore what happens in buyers' minds between the acts of receiving impressions about products and making his purchasing decisions. He identifies three motives related to purchasing behavior: personal, psychological, and social factors (Kotler, 1965). Zeithaml (1988) pointed out that customers tend to undertake a valuation to balance cost and benefit during the consumption process and they are influenced strongly by customer perception, culture, and price (Zeithaml, 1988). Indeed, adjusting to adapt to culture and winning the consumer's heart is the first step to creating a successful business; they will become an advantage against competitors (Zeithaml et al., 1993). Armitage and Conner (2001) introduced the concept of planned behavior to understand the communication between brand preference, customer satisfaction, and determinant affecting purchase behavior (Armitage & Conner, 2001). They show that product quality is considered the most important motive, followed by product availability, price, and diversity. So far, quality and price are always seen as the priority for a product that directly affects purchase intention (Bray, 2008; Zeithaml, 1988). A well-qualified product with a reasonable price can be seen as a successful product.

However, many studies conducted currently found a reverse pattern. For example, Suroto et al. (2013) concluded no association between price and buying action while culture and brand loyalty exert tremendous influence on the final decision (Suroto et al., 2013). Packaging, regulations, and origin-labeling ingredients also play important roles in changing customer behavior in buying a product (Al-Adamat et al., 2020; Ansar, 2013; Chen, 2013). For example, Ansar (2013) demonstrated a close relationship between demographic factors (including age and education) and the eco-literacy of young people. This study also confirms the significance of price and ecological packaging with green purchase intention (Ansar, 2013). Empirical evidence strongly suggested that customers consider three criteria while purchasing decisions: product attributes, price, and geographical location (Ahmad & Zhang, 2020; Dwidienawati et al., 2020). While they prefer a product with sufficient nutrition and diverse selections, price is expected at a reasonable level (Ahmad & Zhang, 2020; Zeithaml, 1988).

Brand image and promotion are two determinants whose impact is minimum (Brucks et al., 2000). The participants of this study pay attention to three main factors: quality (freshness, taste, and composition), availability (diversity and supply), and price (Suroto et al., 2013). Suroto et al. (2013)

revealed that business development substantially hinges on trust with clients. Milk production and distribution have a direct impact on customer's health. Hence, trust is such an important criterion in determining purchase intention (Al-Adamat et al., 2020). Similarly, empirical evidence shows that customer service is one of the prerequisites to sales success (Ahmad & Zhang, 2020; Zeithaml et al., 1993). Customer service is a key element to create a positive impression for customers. Hence, trust is gradually built on satisfaction, and products would be promoted via an effective channel called word-of-mouth marketing (Bray, 2008; Nam, 2010). Preference for a product or service can be reflected in customers' daily conversations or reviews on social media. Consequently, products will become ubiquitous, not only boost customer satisfaction but also reach new potential consumers (Susanto, 2013).

In Vietnam, many studies have been conducted to understand customers' interests and behaviors. For example, some scholars considered product specification, price, location, and promotion as key marketing elements influencing customers' purchase decisions in buying fresh food of customers (Bui et al., 2021; Ha & Tam, 2015). Others identified factors and scales formulating brand loyalty, explored the direct and indirect relationship between brand experience and customer brand loyalty, loyalty between domestic milk products and foreign milk products (Ngo et al., 2019). Nguyen et al. (2019) applied two methods to measure factors influencing customers' behavior when choosing green products. This research also studies customers attitudes to the attributes, benefits, and values of the product; identifies factors influencing customer's green purchase intention; and compares the data-collecting ability and the superiority of the two methods (Nguyen et al., 2019). They found the importance and necessity of interpreting changes through customers' behavior and that the strongest factors are influencing subjects and product utility (Truong, 2018).

The purpose of this analysis is to identify and evaluate driving factors that contribute to purchase decisions of milk products, with a case study of Dielac Alpha formula – a famous pounder milk introduced by Vinamilk. This research would provide information about the importance of each particular factor, which would be a foundation for management to improve their business while developing the national dairy industry. By understanding how consumers select a product, merchants can prepare a detailed marketing plan aiming at the top reasons for purchasing goods to leverage sales performance. This study also helps marketers present their products to generate a maximum impression on consumers. Last but not least, understanding purchase intention is the key element if a company wants to engage existing clients and expand its brand awareness to a larger population.

2.2. Hypotheses Development

Accordingly, consumption behavior has been formed to the stages of the family, with their typical financial situation and purchase interest in each stage (Bray, 2008). Researchers found that females show predominance in perception growth and tend to think faster than males. However, they are easily influenced by emotions as compared to males (Armitage & Conner, 2001). The differences in body characteristics, hormones lead to differences in their consuming behavior (Ajzen, 2011). Thirdly, the purchase decisions of the individual are always influenced by other people in the family. The influence level of their husband or wife depends on types of products, knowledge, and experience about the product area. Moreover, when it comes to selecting a product, customers tend to ask others in their residential area to understand its quality and price better. This formulates their belief in the product and positively affects their decision of choosing Dielac Alpha. Finally, it is obvious that income directly affects consumer spendings. Higher-income families tend to purchase expensive items and vice versa. Except for necessities, demand for most goods is substantially affected by income.

H1: Demographic factors including age, gender, marital status, residential area, and income influence the purchase intention of Vietnamese adults to buy milk products.

As a product for infants and toddlers in their first years of life, formula milk is considered strictly by their parents. They tend to be sensitive to the milk composition (Brucks et al., 2000). First, milk must contain nutritional ingredients for children's health, such as vitamins, DHA, minerals, etc. Besides, formula milk should facilitate both the physical and mental development of kids. Many empirical studies have confirmed the significance of product attributes and products in determining the customer behaviors such as (Zeithaml, 1988), (Brucks et al., 2000), and Annamdevula & Bellamkonda (2016). They found that product characteristics stimulate how people decide to purchase Dielac Alpha.

H2: Product attributes are associated with purchase intention to buy milk products.

Setting price requires various economic aspects, it is a complex process to assess whether a product is sold at a reasonable price. Therefore, manufacturers must consider cost, customer perception, demand, average industry price, and competitors. Brucks et al. (2000) suggested three major pricing strategies: customer value-based pricing, cost-based pricing, and competition-based pricing (Brucks et al., 2000). According to the first type of pricing strategy, when a customer purchases a product or service to satisfy

their needs, they buy the benefits provided rather than the actual product (Zeithaml, 1988). A customer's estimation of the benefits determines the value attached to a given product or service. When customers compare different products/ services and brands, they will select what they believe in providing the most need-satisfying benefits. If a company wishes to follow a customer value-based pricing strategy, it should mainly rely on the buyer's valuation towards a product during pricing procedures (D'Souza et al., 2007).

H3: Price strongly impacts purchase intention to buy milk products.

As a product directly impacts one's health, there is no doubt that milk quality is one of the leading factors to be considered by customers(D'Souza et al., 2007). The quality of a product is defined by the mix of components it comprises. A dairy product is chosen if kids prefer its taste, and its attributes benefit children's health. In addition, mothers tend to buy a product with good preservation to maintain milk quality throughout the usage period (Ngo et al., 2019).

H3: Product quality is related to purchase intention to buy milk products.

A brand is defined as a combination of public interest and control over materials, production, distribution, etc. Hence, market research is a crucial stage to be carried out as it provides information about current trends and tastes (Ngo et al., 2019). Brand name selection is also an essential issue to be considered (Brucks et al., 2000). The brand name is one of the most foundational elements of brand identity. A memorable brand name will help build and maintain a distinct presence among consumers and other key audiences, as well as convey a message about the values for which it stands Last but not least, a brand's reputation is a key motive for selecting a product (Chen et al., 2020). Customers tend to choose products of a brand that is widely recognized. In general, milk brand has a tremendous impact on customer purchase behavior (Huang et al., 2014).

H4: Branding is related to purchase intention to buy milk products.

Promotion is a method to bring a product to customers' attention. Two effective tools of promotion that directly affect purchase decisions are advertising and price discount (Katt & Meixner, 2020). First, adverts provide useful information about products or services available on the market; hence, informative advertising can help customers make the right choice to meet their needs and suit their pockets (D'Souza et al., 2007; Truong, 2018). In addition, vivid graphics and images found in advertisements may draw significant

customers' attention to products. Second, consumer intention to buy can arise as a result of the stimulus offered by the company, including a discount on the products sold. Offering an attractive reduction in the price provides value to existing buyers and increases customer reach. At an affordable price, more groups of people have a chance to experience products or services. Based on the above analysis, it can be seen that the promotion has a positive and significant effect on consumer's purchase behavior.

H5: Promotion is related to purchase intention to buy milk products.

Now a day, customers seem to be more interested in products that look attractive and environmentally friendly (Chen et al., 2020). Many studies have been conducted to understand and explore how the product image/ packaging influences customer behaviors including their purchase intention, satisfaction, and loyalty (Ajzen, 2011; L. Chen, 2013). These studies have found that the majority of customers tend to select products visually (Huang et al., 2014). As a consequence, they are easily impressed by-products with creative and convenient packaging. The packaging also implies the professional manner in the production of the manufacturing company (L. Chen, 2013). When the environment becomes a global concern, packages including recycled material are also preferred by consumers. Therefore, empirical evidence suggests a close and positive relationship between packaging and the preference to buy a product over others.

H6: Packaging is related to purchase intention to buy milk products.

At each stage of growth, humans need specific types of nutrition. As a consequence, formula products are often broken down by age group (Truong, 2018). Thanks to leaps in global trading, consumers nowadays have a wide range of choices from various sources worldwide. Thus, experience from existing users becomes a source of information for new consumers when they want to choose an appropriate product. Social media becomes an inferential clue as there are several ways to induce consumers' belief that "what is popular is good," for example, a feedback post or a review video (Ha & Tam, 2015). Therefore, people from anywhere around the world can access and become affected by previous purchasers.

H7: Reference is related to purchase intention to buy milk products.

There are two dimensions of customer service: providing service processes and results of service itself

(Annamdevula & Bellamkonda, 2016). Customer satisfaction is a major benchmark for evaluating service quality. Great efforts to improve service would be futile if they cannot meet consumer's needs. This is because service quality is found to be a critical factor influencing customer satisfaction and loyalty since it changes the customer behavior toward a product/service provided (Ahmad & Zhang, 2020). Therefore, investigating clients' data to understand their requirements is essential for a company to provide effective services.

H8: Service quality is associated with purchase intention to buy milk products.

3. Methodology

3.1. Data Collection and Analysis

This study utilized primary data to analyze factors of choosing the Dielac Alpha brand. Primary data is collected from primary sources to serve the quantitative analysis using questions set on 2000 people; the research subjects target over-18-year-old breadwinners and have power over spending decisions in their families.

The research survey is released publicly thanks to personal Facebook walls and personal messages to potential subjects like mothers and homemakers to collect volunteer answers. The survey was online for one month. This is long enough for respondents to answer all the questions objectively with no threat from others. Second, respondents' information is kept secret, and the data collected is compatible with results from other studies. Therefore, the study is protected under the threat of the entity or respondents' judgment. For all the reasons mentioned above, the reliability of the research's results is ensured.

A structured 5-point Likert scale questionnaire-based survey, from "Absolutely disagree" to "Absolutely agree," is employed to collect data. After calculating all the necessary figures, we import the data to SPSS 20 software to clean and synthesize. The scale's reliability is tested by Cronbach's alpha value and analyzing factors EFA. Then we formulate variables of the regression model of factors affecting Dielac Alpha purchase decision.

The study is undertaken in 3 steps with the support of the statistical data software SPSS:

- Scale development
- · Primary data collection
- Data analysis

The scale and the significance of observation variables are tested by Cronbach's alpha and EFA (Exploratory Factor Analysis) method. The scale is approved after excluding all variables with item-total correlation under 0.3 and the

value of Cronbach's alpha under 0.6. Using Exploratory Factor Analysis, variables with Factor Loading under 0.6 are removed from the scale as they have a small correlation with latent variables (measurement definitions). The last step is to test the model using a multiple linear regression method at a 5% significance level.

3.2. Empirical Model

Therefore, the author formulates the following research model to test the relationship between seven independent variables and the purchase intention to buy Dielac Alpha milk (Table 1).

$$\begin{aligned} \text{PI} &= \alpha + \beta_1 \times \text{Age} + \beta_2 \times \text{Gender} + \beta_3 \times \text{MS} + \beta_4 \times \text{RA} \\ &+ \beta_5 \times \text{Income} + \beta_6 \times \text{PA} + \beta_7 \times \text{Price} + \beta_8 \times \text{PQ} \\ &+ \beta_9 \times \text{Brand} + \beta_{10} \times \text{Pro} + \beta_{11} \times \text{Pack} + \beta_{12} \times \text{Ref} \\ &+ \beta_{13} \times \text{SQ} + u \end{aligned}$$

In which α is the intercept; β is the coefficient, and u is the error.

4. Results

4.1. Reliability Analysis

For the Product attributes, the Corrected item-total Correlation was all positive and greater than 0.3, demonstrating that each item has an association with others on the scale. Besides, all Cronbach's alpha if Item Deleted were between 0.6 and 0.905 (Cronbach's alpha). To summarise, five observed variables ensure reliability and are eligible for further research.

For the product quality variable, the result revealed no observed variable with Corrected Item – Total Correlation less than 0.3, which demonstrates the coherence among five items of Product Quality. In addition, all Cronbach's alpha if Item Deleted is less than Cronbach's alpha (0.922). This implied that five observed variables ensure reliability.

Corrected Item – Total Correlation of the Brand were all above the recommended level of 0.3. Therefore, each item has an impact on other items on the same scale. Moreover, all Cronbach's alpha if Item Deleted were below Cronbach's alpha (0.902). In conclusion, four items of the scale ensure reliability and are acceptable for further research.

For the promotion variable, the result revealed no observed variable with Corrected Item – Total Correlation less than 0.3, which demonstrates each of them has coherence with each other. In addition, all Cronbach's alpha if Item Deleted is less than Cronbach's alpha (0.933). This implied that five observed variables ensure reliability.

For the packaging variable, the scale had high reliability with Cronbach's alpha at 0.903. However, the result of the

Table 1: List of Variables

Variables Meaning F		Role	Measurement	Model	
PI	Purchase intention	Dependent variable	Purchase intention	PI	
Age	Age	Control variable	Age	AGE	
Gender	Gender	Control variable	Male	GENDER	
			Female		
MS	Marital status	Control variable	Single	MS1	
			Married	MS2	
RA	Residential area	Control variable	Countryside	RA1	
			Town	RA2	
			City	KVS3	
Income	Income	Control variable	Income	Income	
PA	Product attributes	Independent variable	Nutrients	PA	
			Height and weight growth	PA2	
			Immunity development	PA3	
			Brain development	PA4	
			Digestion development	PA5	
Price	Price	Independent variable	Price	Price	
PQ	Product quality	Independent variable	Taste preference	PQ1	
			Nutrition value	PQ2	
			Humidity insurance for clotting prevention	PQ2	
			Quality consistency throughout the useful life	PQ3	
			Compliance with Food Hygiene and Safety	PQ5	
Brand	Brand	Independent variable	National prestige	Brand1	
			International prestige	Brand2	
			Long-standing reputation	Brand3	
			Creditability	Brand4	
Pro	Promotion	Independent variable	Advertisement frequency	Pro1	
			Advertising appeal	Pro2	
			Accurate information	Pro3	
			Generous discount	Pro4	
			Celebrity endorsement	Pro5	
Pack	Packaging	Independent variable	Attractive packaging	Pack1	
			Careful packaging	Pack2	
			Sufficient description	Pack3	
Ref	Reference	Independent variable	Reference from friends	Ref1	
			Doctor's recommendation	Ref2	
			Reference from relatives	Ref3	
SQ	Service quality	Independent variable	Attitude	SQ1	
			Delivery services	SQ2	
			Consulting services	SQ3	
			Exchange and complaint policy	SQ4	

observed variable BB2 is 0.919. This implied that BB2 was not eligible for further analysis; hence, it was deleted from the scale.

For the reference variable, the result revealed no observed variable with Corrected Item – Total Correlation less than 0.3. In addition, all Cronbach's alpha if Item Deleted is less than Cronbach's alpha (0.911). This implied that all four observed variables in the scale ensure reliability.

For the service variable, all Cronbach's alpha if Item Deleted were below Cronbach's alpha (0.902). Analyzing the Corrected Item – Total Correlation identified that four items had a value greater than the recommended level of 0.3, supporting the internal reliability of the scale. In conclusion, four items of the scale ensure reliability and are acceptable for further analysis.

The KMO statistic is used to evaluate sampling adequacy for particular variables and the model. The KMO statistic varies between 0 and 1. The value of KMP exceeding 0.7 indicates that the result is good. For these above data, KMO has a value of 0.946, which falls into the superb range. Therefore, factor analysis was appropriate. Barlett's test of Sphericity is a measure of the significance of the study and thereby shows the validity and suitability of collected data. The recommended significance value of Barlett's test of Sphericity is less than 0.05. Results of the test revealed that it has a significant value at 0.000. Barlett's test was highly significant. Hence, factor analysis was appropriate.

Extracting the factor aims to determine the linear combination of variables that have the biggest impact on the dependent variable. The result identified the eigenvalues associated with each linear factor in three situations: before, after, and after rotation. Each subsequent factor that has an eigenvalue less than one no longer contributes to the model. Conversely, those determinants with an Eigenvalue above 1 present the number of factors needed to depict the fundamental dimensions of the data. In this study, this was factor 4, with an explained variance of 3.912 and Eigenvalues of 1.135. All the remaining factors with an Eigenvalue less than one were not correlated with each other. Thus, only four factors (1-4) contributed to the model. In addition, variance equals 79.834% exceeding 50%, which demonstrates the EFA model is appropriate. To summary, four factors extracted account for 79.834% variance of observed variables.

4.2. Regression Analysis

The result from statistical software SPSS reveals that adjusted R^2 is 0.433, which means that 43.3% of the variation of purchase decisions could be explained by the variation of the four groups of independent variables. In comparison, other factors and indeterminate error explained the rest (57.6%). However, this value was still smaller than 0.5, which concludes that the model was not appropriate.

Another test applied is The Durbin – Watson statistic (d) test. It is used to identify whether there is autocorrelation in the residuals (prediction error) from a regression analysis. The value of Durbin-Watson was 1.668. Because it lies between 1.5 and 2.5, there is no autocorrelation in the model. Hence, we can assume that there was no first-order linear autocorrelation in our multiple linear regression model.

Table 2 shows the analysis of variance (ANOVA) to examine the reliability of the regression analysis. The value of Sig (P-value) in Column 5 was used to evaluate the suitability (N) of the model. As it was less than 0.05, the model was suitable. In conclusion, the result of regression analysis ensured reliability.

$$\begin{aligned} \text{PI} &= \alpha + \beta_1 \times \text{Age} + \beta_2 \times \text{Gender} + \beta_3 \times \text{MS} + \beta_4 \times \text{RA} \\ &+ \beta_5 \times \text{Income} + \beta_6 \times \text{PA} + \beta_7 \times \text{Price} + \beta_8 \times \text{PQ} \\ &+ \beta_9 \times \text{Brand} + \beta_{10} \times \text{Pro} + \beta_{11} \times \text{Pack} + \beta_{12} \times \text{Ref} \\ &+ \beta_{13} \times \text{SQ} + u \end{aligned}$$

Regression Coefficients indicated that the variables could explain a relatively high percentage variation in a purchase decision. As state in Table 4.15, sig. (Constant) = 0, which was less than the significance level 0.05 for all variables. Due to positive intercept, if not affected by independent variables, the purchase decision has a value of 2.35. In respect of independent variables, six items had sig. greater than 0.05. They are resident area, income, reference, packaging, brand, and product attributes. This finding implies that there was no association between them and the dependent variable. All four remaining items (Age, Gender, Maturity status, and price) met the criteria of sig. test, therefore, they have a significant impact on how customers decide to purchase milk. Through the Standard Beta Coefficient, we determined the impact of each variable in the regression model on the dependent variable. While the price has the highest importance, we found out that three control variables, namely marital status, age, and gender, are also motivational motives for purchasing Dielac Alpha formula milk, and the level of influence of these four variables are Price(0.480) > MS(0.208) > Gender(-0.190) > Age(-0.214).

The Standard Beta Coefficient of Price had the highest value (0.480); this implied that price had the strongest effect on the customers' Dielac Alpha purchase decision. The control variable Marital Status (MS) has the second strongest effect on the customers' Dielac Alpha purchase decision. The control variable Gender has the third strongest effect on the customers' Dielac Alpha purchase decision. The coefficient of this variable is -0.19, implying that women seem to have a higher level of purchase intention than men. Last but not least, age has the weakest effect on the customers' Dielac Alpha purchase decision.

From the research results presented in Table 2, it can be said that the price has the highest importance to the decision

Table 2: Regression Analysis

Coefficients ^a												
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics					
		В	Std. Error	Beta			Tolerance	VIF				
1	(Constant)	2.35	0.45		5.223	0						
	AGE	-0.188	0.054	-0.214	-3.476	0.001	0.705	1.418				
	Gender	-0.395	0.116	-0.19	-3.42	0.001	0.865	1.155				
	MS	0.433	0.122	0.208	3.544	0	0.774	1.292				
	RA	0.05	0.074	0.037	0.671	0.503	0.878	1.138				
	Income	0.048	0.072	0.04	0.66	0.51	0.712	1.405				
	Price	0.58	0.071	0.48	8.183	0	0.772	1.295				
	Ref	-0.211	0.138	-0.151	-1.531	0.127	0.275	3.637				
	Pack	0.235	0.141	0.181	1.671	0.096	0.227	4.412				
	Brand	-0.032	0.084	-0.025	-0.381	0.703	0.599	1.671				
	PA	-0.118	0.092	-0.095	-1.278	0.203	0.483	2.07				

customers to choose Dielac Alpha formula milk. As milk is a basic food providing proper nutrition for all age groups, striking a balance between price and product quality is complicated. In the light of the industrial age, technology has permeated every aspect of production. Therefore, management should pay more attention to up-to-date equipment. Modern machines would help boost productivity as well as save raw material and labor hours. Besides, every staff working at dairy firms should register for regular training courses which provide knowledge about food hygiene and safety. Sanitary is considered as a center of consumer interest as they are sensitive to what they consume. Another recommendation is to undertake appropriate internal control to help the company prevent defective products and reduce operating expenses.

As a consequence, the cost of goods sold would remain at a reasonable level, and the selling price would not have significant variation. In addition, dividing customers into different segments is also a way to develop appropriate pricing strategies, which help eliminate monetary barriers consumers face. Due to the wide range of prices, consumers would have more selection of purchasing dairy products. Furthermore, marital status is of the second greatest importance to purchase decisions as mothers are the major milk consumer. Formula milk is considered a drink that helps supplement newborns with essential nutrients to improve their overall development. Therefore, mothers always look up products made from prestigious brands with fortified ingredients. Therefore, if manufacturers want to focus on marketing campaigns, their strategies should concentrate on brand reputation and positive health impact.

Besides, unmarried women are also potential purchasers in the foreseeable future. Hence, the marketing department may consider possible factors influencing this group and research the most attractive ones in detail. It is widely acknowledged that nowadays, social media have a pervasive impact on our lives. There are many social networks such as Facebook, Instagram, or YouTube, with a great number of users. Thus, promotion via those channels is an effective way to access numerous kinds of consumers. Besides, creative graphics and viral messages would be key to winning the hearts of numerous consumers, especially the young generation. Gradually, brand awareness would rise, and more people would notice the brand's milk products.

5. Discussion and Conclusion

In these Covid times, the Vietnamese economy is facing a multitude of difficulties and challenges. The simultaneous decrease in the price of necessities affects the residential sector, the middle and low-income class in society. The fact that the salary of most laborers stands still leads to their careful considerations in making purchase decisions, including milk purchase decisions. The study proves the strongest influence of price on Dielac Alpha purchase decision. The next factors, including gender, age, marital status, play a critical role in their decision. This result is significantly similar to Zeithaml (1988); however, the difference lies in three factors, marital status, sex, and age, that affect the purchase decisions.

Regarding utilization of these results by practice, there are several viable solutions to boost demand for purchasing

milk decisions. They should be taken on both governmental and corporation levels. For years, Vietnamese people have been greatly affected by a psychological "cult" in which imported goods were considered better in quality and elevated the social status of their owners. This mindset is not always accurate. There have been a large number of counterfeit goods with low quality dominating the market. Those products not only do harm to physical health but also corrupt the production and distribution of domestic enterprises. To mitigate the impact of the problem mentioned above, several measures can be adopted. The "Vietnamese people prioritize Vietnamese goods" is one of the considerable governmental efforts. Issued in 2009 following the Proclamation # 264-TB/TW from Politburo, it is known as a campaign to raise locals' awareness of domestic products. Thanks to large-scale deployment, the campaign has gradually attracted the public and created trust among many of the population. After twelve years since its launch, many goods made in Vietnam have successfully established a foothold in the consuming market. According to the previous positive outcome, the "Vietnamese people prioritize Vietnamese goods" campaign should be continuously applied wider and more effectively.

As governments take a leadership role in regulating the market, authorized agencies have to act as the mirror for advocating and consuming local products. More detailed policies regarding domestic trade promotion should be published to encourage Vietnamese manufacturers and merchants. As price has the strongest influence on the purchase decision, responsible authorities should also have a price management policy, such as price ceiling, to avoid pushing up dairy prices and unfair competition among dairy farms. Concerning counterfeiting issues, state regulators should build a technical barrier to monitor the quality of domestic and foreign products. This would be an effective way to prevent the distribution of low-quality goods and protect consumer benefits. At the same time, stringent quality standards stimulate national brands to upgrade their technology and manufacture.

The conclusions and recommendations are given based on SPSS results. However, the fact is that there always exist disadvantages besides advantages in a paradigm. Some of the limitations are the time for data collection is short, which results in a small number of observations; the scope of the survey is limited as the survey is undertaken in HCM City only, hence, the research sample is not diverse. Many factors are proposed initially, but the findings show that only 4 factors are acceptable, including Price, Marital status, Age, and Sex. For future implementation, we recommend that future research be expanded, and factors that are likely to mutate the data should also be excluded. Subjects for future research can be mothers and married people to have data with better accuracy. Secondly, this study is limited in evaluating and explaining determinants of consumers' purchase decisions

of Dielac Alpha. Having a deeper insight into consumer's demand seeking or marketing strategy for business can be a clue for development in the future. With the theoretical and empirical evidence discovered, this study can be seen as a trustworthy reference for future studies about factors influencing the purchase decision of Dielac Alpha.

References

- Ahmad, W., & Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, 267, 122053. https://doi.org/10.1016/j.jclepro.2020.122053
- Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. New York: Taylor & Francis.
- Al-Adamat, A., Al-Gasawneh, J., & Al-Adamat, O. (2020). The impact of moral intelligence on green purchase intention. *Management Science Letters*, 10(9), 2063–2070. https://doi.org/10.5267/j.msl.2020.2.005
- Annamdevula, S., & Bellamkonda, R. S. (2016). The effects of service quality on student loyalty: The mediating role of student satisfaction. *Journal of Modelling in Management*, 1(2), 446–462. https://doi.org/10.1108/JM2-04-2014-0031
- Ansar, N. (2013). Impact of green marketing on consumer purchase intention. *Mediterranean Journal of Social Sciences*, 4(11), 650–650. https://doi.org/10.5901/mjss.2013.v4n11p650
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499. https://doi.org/10.1348/014466601164939
- Ballard, O., & Morrow, A. L. (2013). Human milk composition: Nutrients and bioactive factors. *Pediatric Clinics of North America*, 60(1), 49–74. https://doi.org/10.1016/j.pcl.2012.10.002
- Bray, J. P. (2008) Consumer Behaviour Theory: Approaches and Models. Bournemouth: Bournemouth University. Discussion Paper.
- Brucks, M., Zeithaml, V. A., & Naylor, G. (2000). Price and brand name as indicators of quality dimensions for consumer durables. *Journal of the Academy of Marketing Science*, 28(3), 359–374. https://doi.org/10.1177/0092070300283005
- Bui, T. Q., Nguyen, N.-T., Nguyen, K. K., & Tran, T.-T. (2021). Antecedents Affecting Purchase Intention of Green Skincare Products: A Case Study in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 8(3), 1295–1302. https://doi.org/10.13106/jafeb.2021.vol8.no3.1295
- Chen, L. (2013). A study of green purchase intention comparing with collectivistic (Chinese) and individualistic (American) consumers in Shanghai, China. *Information Management and Business Review*, *5*(7), 342–346. https://doi.org/10.22610/imbr. v5i7.1061
- Chen, Y. S., Chang, T. W., Li, H. X., & Chen, Y. R. (2020). The influence of green brand affects on green purchase

- intentions: The mediation effects of green brand associations and green brand attitude. *International Journal of Environmental Research and Public Health*, 17(11), E4089. https://doi.org/10.3390/ijerph17114089
- De Graaf, S., Van Loo, E. J., Bijttebier, J., Vanhonacker, F., Lauwers, L., Tuyttens, F. A. M., & Verbeke, W. (2016). Determinants of consumer intention to purchase animal-friendly milk. *Journal of Dairy Science*, 99(10), 8304–8313. https://doi.org/10.3168/jds.2016-10886
- D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and their impact on the influence of price, quality, and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement,* and Analysis for Marketing, 15(2), 69–78.
- Dwidienawati, D., Tjahjana, D., Abdinagoro, S. B., Gandasari, D., & Munawaroh, null. (2020). Customer review or influencer endorsement: Which one influences purchase intention more? *Heliyon*, 6(11), e05543. https://doi.org/10.1016/j.heliyon.2020. e05543
- Ha, N. M., & Tam, H. L. (2015). Attitudes and purchase intention towards counterfeiting luxurious fashion products in Vietnam. *International Journal of Economics and Finance*, 7(11), 207–221. https://doi.org/10.5539/ijef.v7n11p207
- Haiden, N., & Ziegler, E. E. (2016). Human Milk Banking. Annals of Nutrition & Metabolism, 69 Suppl 2, 8–15. https://doi.org/10.1159/000452821
- Huang, Y. C., Yang, M., & Wang, Y. C. (2014). Effects of the green brand on green purchase intention. *Marketing Intelligence & Planning*, 32(3), 250–268. https://doi.org/10.1108/MIP-10-2012-0105
- Katt, F., & Meixner, O. (2020). Is it all about the price? An analysis of the purchase intention for organic food in a discount set by means of structural equation modeling. *Foods (Basel, Switzerland)*, 9(4), E458. https://doi.org/10.3390/foods9040458
- Kotler, P. (1965). Behavioral models for analyzing buyers. *Journal of Marketing*, 29(4), 37–45. https://doi.org/10.2307/1249700
- Mansen, K., Nguyen, T. T., Nguyen, N. Q., Do, C. T., Tran, H. T., Nguyen, N. T., Mathisen, R., Nguyen, V. D., Ngo, Y. T. K., & Israel-Ballard, K. (2021). Strengthening newborn nutrition

- through the establishment of the first human milk bank in Vietnam. *Journal of Human Lactation: Official Journal of International Lactation Consultant Association*, 37(1), 76–86. https://doi.org/10.1177/0890334420948448
- Nam, E. (2010). The effect of blog characteristics on relationship quality and purchase intention. *The Journal of Distribution Science*, 8(2), 45–51. https://doi.org/10.1123/1816-3421.11.07.33
- Ngo, H. Q., Nguyen, T. Q., Long, N. T., Tran, T. V., & Hoang, T. M. (2019). Factors affecting brand and student decision buying fresh milk: A case study in Ho Chi Minh City, Vietnam. *The Journal of Asian Finance, Economics, and Business*, 6(3), 247–258. https://doi.org/10.13106/jafeb.2019.vol6.no3.247
- Nguyen, T. T. H., Yang, Z., Nguyen, N., Johnson, L. W., & Cao, T. K. (2019). Greenwash and green purchase intention: The mediating role of green skepticism. Sustainability, 11(9), 2653.
- Palmeira, P., & Carneiro-Sampaio, M. (2016). Immunology of breast milk. Revista Da Associacao Medica Brasileira (1992), 62(6), 584–593. https://doi.org/10.1590/1806-9282.62.06.584
- Suroto, K. S., Fanani, Z., & Nugroho, B. A. (2013). Factors influencing consumer's purchase decision of formula milk in Malang City. *IOSR Journal of Business and Management*, 9(3), 95–99. https://doi.org/10.9790/487X-0939599
- Susanto, A. H. (2013). The influence of customer purchase decisions on customer satisfaction and its impact to customer loyalty. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 1*(4), 97–129. https://doi.org/10.35794/emba.1.4.2013.3345
- Truong, N. X. (2018). The impact of Hallyu 4.0 and social media on Korean products purchase decision of generation C in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 5(3), 81–93. https://doi.org/10.13106/jafeb.2018.vol5.no3.81
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. https://doi.org/10.2307/1251446
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal* of the Academy of Marketing Science, 21(1), 1–12. https:// doi.org/10.1177/0092070393211001