



FACTORS AFFECTING CONSUMER BEHAVIOR IN THE SOFT DRINK MARKET IN HCMC

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Abstract

By this paper, we ponder factors affecting the consumer behavior in the soft drink market in HCMC including quality & safety (QS), enjoyment (EN), nutrition (NU), convenience (CO), brand (BR), price (PR), distribution (DI) and promotion (PM). These factors are objectively indicated by 300 respondents in HCMC. Also, managerial implications may be identified with regard to such the factors.

1. Problem

Within five recent years, the soft drink market has made good progress with the birth of new product lines whetting the appetite of consumers. The Vietnam Beverage Association has forecasted that the gross output of soft drinks retailed in Vietnam will have jumped by 50% in 2012 compared with the 2007. Yet, this growth cannot meet the tremendous need at the present, either. This is to say, Vietnam's soft drink market is very potential for both home investors and foreign ones.

When the beverage industry has to face stiff competitions and a continual increase in prices of raw materials at present, its participants must work out appropriate and effective plans to meet the need of consumers as well as to maintain and expand their own market share. New products of high quality must be produced so as to bring in essential benefits for consumers and fuel the 'Viet-

namese advocate home products' campaign to achieve specific success.

So far, studies on consumer behavior in general and that in the food market in particular have held attractions for researchers. For examples, Kotler (1999) considered quality, price, brand, distribution network, promotion, income, age and educational level as factors affecting the consumer behaviors. Meanwhile, for Alvensleben (1997), such these factors include quality, price, income, nutrition, healthiness, enjoyment, safety, transparency and convenience. As for Nihan Mutlu (2007), the consumer behavior depends much on price, distribution network, technology, economy and politics. However, the question arises as to whether or not these factors can be applied in the soft drink market of Vietnam. By response to this question, beverage manufacturers may have reliable information on the consumer behavior and appropriate plans to enhance their competitiveness and business effectiveness in the soft drink market, which has full potential and attraction for both short-term and long-term development and even helps develop relevant services such as restaurants, tourism, healthcare and public health propagation.

Thus, by this paper, we ponder factors affecting the consumer behavior in the soft drink market in HCMC.

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2. Theoretical fundamentals and hypotheses

a. Purchasing trend (PT):

According to Ajzen (1991), the consumer behavior trend is expressed by the willingness of consumers in execution of a planned behavior. It is deemed as a premise for actual behaviors and represented by four factors namely action, target, context and time. As for Triandis (1980), the consumer behavior trend is the guidance on the actual actions.

The TRA model (Fishbein & Ajzen, 1975) pointed out that purchasing trends may help forecast the consumer behavior. In order to understand thoroughly factors affecting the purchasing trends, let us consider the attitude and subjective standards of consumers towards an object/event, thereby predicting the consumer behavior.

b. Quality and safety (QS):

Anybody of us always hopes to buy hygienic and healthy foods. However, in order to attain the maximum profits, people have been adding poisonous substances such as artificial preservatives and admixtures to products. Raw materials and water sources have been contaminated by chemicals and heavy metals. Thus, for the urgent need to protect consumers' health and the advancement of science and technology, each nation in the world has had stringent controls over the food's safety and hygiene. Food manufacturers must try their best to enhance their production lines so as to meet such the urgent need. For developed countries with high scientific breakthroughs and high GDP, the matter of food's hygiene and safety is always placed top. It is also the indispensable trend in the food processing industry (Alvensleben, 1997).

For this reason, the quality and safety have impacts on the consumer behavior. We can put forward following hypothesis.

Hypothesis 1: The higher the quality and safety of beverage is, the higher the purchasing trend goes.

c. Enjoyment (EN):

In addition to the nutrition and healthiness of foods, consumers wish to smell the exotic scent and see the original catchy arrangement as well as to enjoy the atmosphere of feasts. When people are free from worries about daily essential necessities, they desire to enjoy original exotic foods (Alvensleben, 1997). Thus, we can assume as fol-

lows.

Hypothesis 2: The higher the need of enjoying exotic beverage is, the higher the purchasing trend goes.

d. Nutrition (NU):

Depending on the age, occupational environment, climate, etc., people need to have basic nutrients such as carbohydrate, protein, lipid, calcium, vitamins, etc. which will energize them. However, the human consumption of these nutrients is different in absolute term. For those with low income, they must make both end meets and may even suffer malnutrition. Those eating excessively may become obese. Some like low-calorie-and-cholesterol foods for diets; others prefer vitamin-enriched products such as functional foods or medical foods which are claimed to have a health-promoting or disease-preventing property beyond the basic function of supplying nutrients (Alvensleben, 1997).

Nutrition and healthiness are essential elements to maintain the life. The more health-promoting property a product has, the more it is interested. As stated above, when the daily life is improved, the need of beverage is also enhanced. In addition to quenching the thirst, it must be energetic, fragrant, nature-originated and health-promoting. This can be evaluated by the following hypothesis.

Hypothesis 3: The more nutrients the beverage has, the higher the purchasing trend goes.

e. Convenience (CO):

In the busy modern society, consumers more and more prefer frozen foods, instant and fast foods due to their convenience. They can save a lot of time from preparing, processing, cooking, waiting and cleaning up (Alvensleben, 1997). Also, ready-made beverage is a preferential choice of the majority.

Hypothesis 4: The more convenient the beverage is, the higher the purchasing trend goes.

f. Brand (BR):

By the cognitive operation, consumers can define important features of product, pool and evaluate information of rival brands so as to opt for the best (Bettman, 1979). By experiencing a brand or via relevant disclosures and analyses on a brand, consumers can easily recognize a brand and have knowledge of its products. Accordingly,

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they answer whether they like or dislike a product (Fishbein & Ajzen, 1975).

To research on the consumer's attitudes towards beverage brands will help understand their attitude, thereby predicting their behavior intentions as well as the purchasing trends when choosing a brand. The name, image and prestige of a brand are significant to enhance its awareness as well as to attract the consumers' belief in its product line. If a brand is strong and popular, product awareness will be increased.

Hypothesis 5: The higher the brand awareness is, the higher the purchasing trend goes.

g. Price (PR):

The price of a product has a great impact on the consumer behavior. It is fixed by the producer on the basis of the overheads or in comparison with the rival price or according to its marketing strategy. A manufacturer may produce many different product lines at the service of market segments and different groups of consumers.

The price is always thoroughly taken into contemplation by consumers. In principle, the lower the price is, the higher the purchasing power is.

Hypothesis 6: The lower the price is, the higher the purchasing power is.

h. Distribution (DI):

The distribution network is to help deliver products to consumers. If it is dense, a convenient product can be known by more consumers. Thus, the consumers can easily purchase products, enhancing the purchasing trend (Kotler, 1999; Nihan Mutlu, 2007).

Hypothesis 7: The more convenient the distribution network is, the higher the purchasing trend goes.

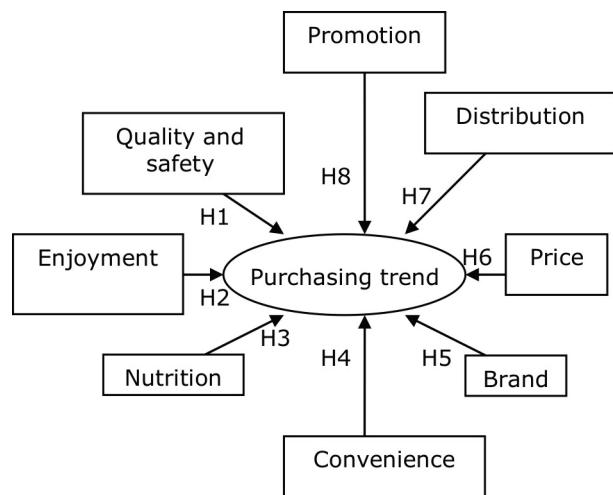
i. Promotion (PM):

Promotion is a set of activities done in order to increase the sales of a product or service; or to advertise and market products of an enterprise with a view to attracting both target consumers and potential ones. If it is done regularly and originally, consumer awareness as well as the purchasing power will be enhanced (Kotler, 1999).

Hypothesis 8: The more promotion there is, the higher the purchasing trend goes.

The above-mentioned hypotheses are summed up in the following research model.

Figure 1: Research model



3. Methodology

a. Sampling:

The surveyed objectives are consumers of all ages, professions and educational levels residing in different districts of HCMC. So far, many soft drink brands of different manufacturers have been traded in the market. Thus, in order to facilitate the survey, we classify soft drinks into four groups, namely carbonated beverage (Pepsi, Coca, Mirinda, Fanta, etc.), noncarbonated beverages (Juicy, winter melon tea, etc.), energy drinks (Sting, Number 1, Red Bull, etc.) and green teas (Lemon green tea, zero-degree green teas, etc.). In each groups, we have chosen several of typical brands.

b. Research methodology:

The research includes two stages, i.e. primary research and official research corresponding to the qualitative research and the quantitative one respectively.

For the qualitative research, we conducted intensive interviews with 17 conveniently-chosen consumers using soft drinks within the three most recent months in April 2010. The research is to insure that utterances of the scale are unambiguous, unrepeated and understandable, thereby adjusting the scale in time and preparing for the later quantitative research.

For the quantitative research, samples are collected by convenience sampling via questionnaires. Researched concepts are measured by the multi-item scale. The five-point Likert scale will

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be employed with '1' representing 'absolute disagreement' and '5' for 'absolute agreement'. The scale's values are produced by using the mean of observed variables to represent researched concepts. The collected samples will be used to evaluate the scale and test hypotheses. Data are processed with the support of SPSS version 13.0.

4. Data analysis

a. Sample description:

Of 300 chosen samples, there are 177 males and 123 females. Those in the 24-30 age bracket account for 40.7%. As far as the educational level is concerned, around 152 persons graduated from universities or colleges and 43 persons are post-graduates, accounting for 50.7% and 14.3% respectively. Regarding occupation and income, office and technical employees make up half of samples; those with the average monthly income from VND1 to 3 million account for 24.7%, from VND3 to 5 million 24.7% and over VND5m per month 29.7%; while the unemployed makes up 1.7%.

b. Scale evaluation and factors analysis:

We employ the Cronbach Alpha with the minimum reliability coefficient of 0.7; and the Exploratory Factors Analysis (EFA) with the KMO index larger or equal to 0.5 and the factor loading larger than 0.5.

By analyzing the Cronbach Alpha, most concepts produce satisfactory alphas. Yet, the Cronbach alpha value of "distribution" construct is 0.747 after dismissing the DI_4 because of its small item-total correlation coefficient (0.136; smaller than 0.3). The "nutrition" has the highest value of 0.842 and the lowest value of 0.774 is for the "enjoyment".

Table 1: Results of analyzing the Cronbach Alpha

Variables	Cronbach Alpha	Item-total correlation coefficient
QS	0.818	0.596 – 0.688
EN	0.774	0.509 – 0.509
NU	0.842	0.575 – 0.720
CO	0.801	0.587 – 0.659
BR	0.701	0.434 – 0.572
PR	0.808	0.490 – 0.700
DI	0.747	0.532 – 0.623
PM	0.816	0.602 – 0.659

Results of EFA produced a satisfactory KMO at 0.843, and eight factors were extracted at the eigenvalue of 1.088 and the gross variance extracted was 66.244%.

After evaluation, each scale includes eight factors and 29 observed variables. The observed variables of each scale will be totalized and averaged so as to represent researched concepts and then be employed for the regression analysis.

Table 2: Factors analysis

Observed variables	Factors							
	NU	PM	CO	PR	QS	BR	DI	EN
NU_2	0.8							
NU_1	0.82							
NU_4	0.76							
NU_3	0.71							
PM_2		0.79						
PM_4		0.78						
PM_3		0.78						
PM_1		0.75						
CO_1			0.78					
CO_2			0.76					
CO_3			0.76					
CO_4			0.69					
PR_3				0.82				
PR_2				0.8				
PR_1				0.78				
PR_4				0.72				
QS_3					0.82			
QS_4					0.75			
QS_1					0.67			
QS_2					0.66			
BR_2						0.72		
BR_4						0.7		
BR_1						0.65		
BR_3						0.63		
DI_2							0.81	
DI_1							0.72	
DI_3							0.71	
EN_2								0.83
EN_1								0.79

b. Regression analysis and hypotheses testing:

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By employing the Pearson's correlation coefficient to analyze the correlation between stated variables namely quality & safety, enjoyment, nutrition, convenience, brand, price, distribution, promotion and the purchasing trend, we can conclude that the variable "purchasing trend" correlates to most of the variables (Table 3) and correlation coefficients are statistically significant ($p<0.01$).

ificance of 0.05. Accordingly, the consumer behavior is mainly affected by factors such as nutrition, convenience, brand, price, distribution and promotion.

5. Discussion

Via what we have mentioned so far, it is possible to conclude that the quality & safety and enjoyment hardly have any impact on the

Table 3: Results of correlation analysis

	QS	EN	NU	CO	BR	PR	DI	PM
QS	1							
EN	.364**	1						
NU	.419**	.201*	1					
CO	.364**	.170**	.248**	1				
BR	.481**	.197**	.417**	.324**	1			
PR	-0.074	0.087	-0.046	.233**	-0.031	1		
DI	.424**	.237**	.350**	.382**	.365**	.113*	1	
PM	.110*	.176**	.189**	.223**	.146**	.262**	.274**	1
PT	.295**	.174**	.436**	.447**	.475**	.207**	.466**	.369**

NB

*: $p<0.05$, **: $p<0.01$

The regression analysis shows that 44.8% of changes in the purchasing trend is explained by means of variables: quality & safety, enjoyment, nutrition, convenience, brand, price, distribution and promotion.

The variables NU, CO, BR, PR, DI and PM has apparent impacts on the purchasing trend with the significance smaller than 0.05; the remainder, QS and EN, hardly have any effect on the purchasing trend for the significance larger than 0.05.

The results also prove that the assumptions of linear relationship, standardized distribution of residual parts, homoscedasticity and independence of error are not violated. The VIF test also produces values smaller than two. Thus, there is no multi-collinearity.

The variance analysis (ANOVA) shows the zero significance. This is to say, the employed linear regression model is appropriate as a whole.

Apart from the first two hypotheses being left out, the remainder are acceptable with the signif-

purchasing trend. As Alvensleben (1997) put it, among reasons and motives of food demands, the quality & safety and enjoyment and enjoyment are effective factors. It could be explained that there is not any substantial difference in quality among

Table 4: Regression results

	Non-standardized coefficient		Standardized coefficient (Beta)	t	p
	B	Standard deviation			
a	0.157	0.273		0.574	0.567
QS	-0.102	0.063	-0.091	-1.617	0.107
EN	-0.01	0.042	-0.011	-0.225	0.822
NU	0.21	0.049	0.216	4.303	0
CO	0.175	0.043	0.202	4.025	0
BR	0.285	0.055	0.272	5.229	0
PR	0.083	0.037	0.105	2.257	0.025
DI	0.187	0.049	0.195	3.783	0
PM	0.172	0.046	0.174	3.715	0

brands of soft drink in HCMC. Those displayed in supermarkets are produced by leading prestigious brand names. Meanwhile, in remote provinces, they are also jeopardized with products by small-sized organizations, making a big difference in quality and requiring consumers to make a good choice. Besides, leading prestigious brand names always hold a strong attraction for consumers because manufacturers have been investing in market research to renew their products line and compete with rival companies before their new products are readily tradable. The enjoyment seems to have no impact on the purchasing trend perhaps due to the fact that the quality of new product lines is not much better than the previous ones, causing no motive for buying a product. Hence, manufacturers should pay more attention to the promotion and activities to enhance the consumer awareness and sentiment.

Soft drinks seem very popular in the daily life and the competitiveness in this market is very keen. Nowadays, when stopping by a store or a supermarket, consumers may be overwhelmed by a great deal of different brand names with diverse prices. The quality and package is not much different, thus consumers usually make their purchasing decisions based on their prices. However, the difference in price is not substantial among manufacturers of the same product, especially when their targets are almost end-users ($\beta = 0.105$ & $\text{Sig.} = 0.025$). Besides, manufacturers need to set up plans to solve the problem of high cost of raw materials with a view to making their products more competitive; improve the marketing and advertising activities to enhance the consumer sentiment and expand the market shares; and invest in modern production lines with a view to reducing the production cost.

Consumers have the trend to buy prestigious brand names ($\beta = 0.272$ & $\text{Sig.} = 0.000$). Soft drink manufacturers must attend to the hygiene and safety of foods and ponder carefully prior to choosing raw materials providers with a view to insuring the health of consumers and the prestige. The brand name is very important to a business. Thus, manufacturers should also polish their image and produce high-quality products. Any con trick in business may put an enterprise on the brink of discredit.

As for the promotion ($\beta = 0.174$ & $\text{Sig.} = 0.000$),

its impact on the purchasing trend is quite high. It is supposed to be the effective way to draw the attention of consumers. In addition, by advertising and commercials, products can hold the retention of consumers. Yet, the reliability and accuracy of each adverts or commercials must be insured so as to avoid negative feedbacks or being brought to discredit when products are sold in public. Annually, both foreign and local enterprises have to spend a lot on advertising, commercials, charity, donations, sponsorship with a view to polishing their image and making a good impression on the consumers.

The purchasing trend is also affected by the distribution system ($\beta = 0.195$ & $\text{Sig.} = 0.000$) and the convenience ($\beta = 0.202$ & $\text{Sig.} = 0.000$). In the modern society, people hardly have time to prepare nutritious meals for themselves. Thus, the demand for ready-to-use products is very high. So does the soft drinks. There is no denying that the canned soft drinks are very convenient. Yet, their convenience will be boosted more if consumers can buy one no matter where they are. Besides, the displaying position is very significant. As far as we concern, the supermarket system is more and more popular because of its modernity, cleanliness, diversity and clear origin of products. Thus, product displayed in a convenient and catchy place may hold the attraction for consumers and enhance the purchasing trend. However, the convenience must be compatible with the hygiene and safety of beverages. A leading brand name shown in a filthy store may discredit the manufacturer and even expose it to ultimate difficulties. Accordingly, although the investment in distribution and displaying systems may cost manufacturers a lot, it is really an important and good investment so as to bring products to consumers.

The nutrition of soft drinks has impacts on the purchasing trend ($\beta = 0.216$ & $\text{Sig.} = 0.000$). Once the living standard are improved, people are ambitious to reach higher requirements. For example, the soft drinks must be delicious, energetic, nutritious, nature-originated and safe; and make consumers feel fresh and cool regardless of disadvantages of a canned beverage. Thus, manufacturers should pay more attention to the development of new products; advertise and market their highlights with a view to causing a good impression on the consumers.

Manufacturers also invest to advertise their brand names in all areas like nutrition, convenience, price, distribution and promotion. In the context of fierce competitions at present, manufacturers should cut off overheads and set up good investment plan to enhance their competitiveness.

6. Conclusion

The research figures out important roles of the brand, the convenience in attracting consumers, the distribution system, the investments in promotion and the competitive price in the soft drink market. Besides, due to the high requirements of consumers, the nutrition also affects the consumer behavior and must be concentrated accordingly.

Due to the fact that the research is limited to HCMC, where the GDP is quite high compared with other regions, the findings are just suitable for urban areas.

The research is executed by convenience sampling. This method is very simple and easy but less objective. The results cannot be representative enough. Factors affecting the consumer behavior in the soft drink market are still restricted causing measurement of variables like "the quality & safety" and "enjoyment" cannot point out their impacts on the purchasing trend. Moreover, there may be some others factors that have not been identified and pondered; causing the fitness of model is not high enough. Thus, the research should be broadened to different economic regions in Vietnam so as to compare the difference in the consumer behaviors. We also need to identify some more factors that may impact the purchasing trends■



References

1. Lê Nguyễn Hậu – *Phương pháp nghiên cứu trong kinh doanh* (Research methodology in business) – Lecture of the Business Administration Master course
2. Nguyễn Đình Thọ & Nguyễn Thị Mai Trang (2007), *Nghiên cứu thị trường* (Market research), HCMC-VNU Publisher
3. Hoàng Trọng & Chu Nguyễn Mộng Ngọc (2008), *Phân tích dữ liệu nghiên cứu với SPSS* (SPSS in Data Analysis), Thống kê Publisher
4. Hoàng Trọng (1999), *Phân tích dữ liệu đa biến* (Multi-variable analysis), Thống Kê Publisher
5. Assael, Henry (2003), *Consumer Behavior: A Strategic Approach*, Houghton Mifflin College Div.
6. Bruner II, Gordon C., K. E. James & P. J. Hensel (1994), *Marketing Scales Handbook: A Compilation of Multi-Item Measures*, American Marketing Association.
7. Kotler, Philip, S. H. Ang, S. M. Leong & C. T. Tan (1999), *Marketing Management: An Asian Perspective*, Prentice Hall.
8. Forket, M. & P. Procházká (2004), *Behavior and Decision Making of Czech Consumer When Buying Beverages*, Mendel University of Agriculture and Forestry, Brno, Czech Republic.
9. Fishbein, M. & I. Ajzen (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.
10. Schiffman, L. & L. Kanuk (1987), *Consumer Behavior*, Prentice-Hall International Editions.
11. Mutlu, Nihan (2007), "Consumer Attitude and Behavior towards Organic Food: Cross-Cultural Study of Turkey and Germany", Master thesis, Stuttgart