

Consumers' attitude and purchasing intention toward green packaged foods; A Malaysian perspective

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Abstract. The interaction of business and environment has been an issue since early 70s. The study of consumers' attitude and purchasing intention toward green packaged foods helps marketers and providers to understand how to improve their green products, what type of green packaging they need and how to attract consumers to buy their products. Packaging as the final tool to reach the consumers has a salient role to transfer the message of green foods. In so far as green packaging is concerned, it is a very new concept in Malaysia. As of today there has been no empirical research on Malaysians attitudes and purchasing behavior toward green packaging. Subsequently the aim of this research would be toward this issue. For the purpose of the study a survey was conducted through mall-intercept personal survey. A total of 134 questionnaires were collected within the Klang Valley in Malaysia. Result of the study indicated that consumers' positive attitude along with demographics can shape the marketing strategy of green food providers.

Keywords: Consumer attitude, intention, green package, food, Malaysia

1. Introduction

The interaction of business and environment has been an issue since 40 years ago when some of the researchers started to write about Ecological Marketing. Nowadays consumers are becoming more educated about their environmental responsibility and have more willingness to choose a green product over a conventional one. Marketers realized that packaging performs an important role in marketing communications and could be one of the most important factors influencing consumer purchase decision. The combination of green and packaging would be a new choice of consumers in developing markets like Malaysia. Marketers who are targeting a green segment of the market should avoid any marketing gimmicks in order to make loyal customers to purchase their green products. Marketers should also notice to subjective norms of consumers, since Malaysian notice to the opinion of the "important others" in making green purchasing decisions.

The customer and product is the challenge of every business, and meeting customer needs is a motive of good manufacturing practice. In order to meet the consumers' needs and wants and for a product to be acceptable to customers, quality and cost of product, the product's performance and even environmental issues should be considered. Malaysia, like many other developing countries, in the early days of abundant resources and minimal development pressures, little attention was paid to growing environment protection and conversation. In so far as green packaging is concerned, it is a very new concept in Malaysia. As of today there has been no empirical research on Malaysians attitudes and purchasing intention toward green packaging of foods. Subsequently the aim of this research would be toward this issue.

2. Green packaging; a novel marketing trend

Packaging has an essential role in marketing and distribution of products. At the point of sale, packaging of products can be a crucial issue in a consumer's purchase decision. It also can impact the consumer's mindset of product by its exposure. Even after the purchase, the package of the product can continue to impact the consumption experience. Scientific studies indicate that packaging allow to attract consumer's attention, transfer valuable product information, position the product in the consumer's mind and

differentiate the product from others. Therefore, understanding how packaging variables, such as color, design, and graphics, impact consumer realization, evaluation, and behavior is of theoretical and managerial importance. Recently, marketing researchers have focused on the effects of package shape on volume perception, package preference, choice, and consumption (e.g., Krishna 2006; Raghurir and Greenleaf 2006; Yang and Raghurir 2005; Folkes and Matta 2004; Wansink and Van Ittersum 2003; Raghurir and Krishna 1999).

More than 73 percent of purchase decisions are taking in the selling places such as supermarkets and hypermarkets (Rentie and Brewer, 2000). As a result, consumers assess different brands alternatives only in selling places. It is estimated that consumers spend approximately 20 minutes in the shop and inspecting 20 products a second which means that consumers has to decide from 24000 brands (Rentie and Brewer, 2000). All these evidences prove the importance of communication in selling places is increasing and shows an increasing significance of product package as a communication of brand and a tool to be differentiated. As a novel trend in the marketplace, the package of a product becomes one of the most predominant features to reach the consumer and transfer the valuable information with the strong decision making process influence.

3. The role of Attitude as a predictor of pro-environmental behavior

The green movement has a strong impetus as the term “going green” had 15.6 Million hits on Google in January 2008 (Erdman, 2008) and 31 million hits just over two months later. Academicians along with marketing practitioners struggle to identify and realize consumer attitude towards green products, the needs of them and to expand market offerings that meet these needs (D’Souza et al., 2005).

Nowadays, a number of consumers comprehend that their purchasing behavior has a direct impact on many ecological problems (Laroche et al., 1996). Concern for environmental issues represent predilection of human beings which affects their behavior in a positive or negative manner (Chan, 1996). These predispositions are commonly referred to as attitudes and beliefs (Ajzen and Fishbein 1980) and environmental concern is a strong attitude towards preserving the environment (Crosby et al., 1981). A series of beliefs with the combination of cognitive or evaluation create an attitude (Heberlein, 1981). One person may hold a lot of beliefs about an object, but researches shows that a relatively small number of those beliefs can contribute as attitude. Previous studies indicate that an individual is capable of attending to or processing only five to nine items of information at a time (Mandler, 1967). It can be argued that consumer’s attitude toward a product or its packaging is primary determined by around five to nine beliefs about the target. These can be considered as salient beliefs at a given point in time. These salient beliefs may be weakened and strengthened or replaced by a new belief; therefore they are subject to change. Ajzen (1985, 1988), Ajzen and Fishbein (1980) explained the link of attitude, intention and behavior which implies that people normally act in accordance with their intentions. In contrast, the study of LaPiere (1934) indicates that the cognitive and effective components of any behavior don’t always match with behavior. However, these studies are not only ones to challenge the assumption that consumers generally behave according to their attitude.

Given the range of findings, it seems to be clear that the link of attitude and behavior has to be approached differently and tested deeply. The attitude of consumer toward a green product or service can be a major deciding factor for a positive purchase decision. Interaction between consumers with positive attitude towards green products (including green packaging) and high market mavenhip with the high product availability will create a favorable attitude towards purchase behavior, which would result in a stronger intention to purchase leading to a higher purchase of green products (Ahmad and Juhdi, 2010).

4. Research design

4.1. Sampling and the Measurement Instruments

The survey was conducted through mall-intercept personal survey. A total of 134 survey questionnaires are collected within the Klang Valley in Malaysia used for data analysis. The respondents asked to fill up the questionnaire and return in immediately.

4.2. Data analysis

The data was analyzed using the Statistical Package of the Social Science (SPSS), employed both the descriptive and inferential analysis techniques (correlation analysis, multiple regression analysis and ANOVA). The statistical analysis was used is SPSS package 16.0.

5. Results and Discussions

A summary of questionnaire shows that 45.5% of the respondents were agreeing to the question of “I would be pleasant if I purchase a green packaged food in the coming month.” In addition, 42.5% were strongly agree for the question of “green packaged food may reduce environmental harm.” It demonstrates the high awareness of Malaysian consumers about the environmental issues.

5.1. Respondents’ demographic analysis

There were 134 respondents of the questionnaire that all indicated their demographics. Majority of them were male (54.5%) and 75.3% of respondents were in the age of 18-45. The sample was predominantly Chinese (38.8%) followed Malays (35.1%). Table 1 demonstrates a summary of Respondents’ demographic.

Table 1: Demographic profile of respondents (n=134)

Characteristic	Percentage (%)
Gender	
Male	54.5
Female	45.5
Marital Status	
Single	41.8
Married	58.2
Age	
18-25	24.6
26-35	23.1
36-45	27.6
46-55	14.9
56 or above	9.7
Income	
<1500	20.9
1500-2999	24.6
3000-4499	23.9
4500-5999	17.9
6000 and above	12.7
Race	
Chinese	38.8
Indian	14.9
Malay	35.1
Others	11.2

5.2. Correlation test

Pearson correlation test were used to identify the relationship between attitude and purchasing intention. According to the analysis, attitude of consumers significantly impact consumer purchasing intention of green packaged foods. Also, the stepwise regression analysis results show that the most important factor to predict purchase intention is attitude. The result of this study supports the theory of Ajzen (1985, 1988), Ajzen and Fishbein (1980) which explained the link of attitude, intention and behavior. The theory implies that people normally act in accordance with their intentions. Table 2 indicates a summary of the results.

Table 2: Relationship between attitude and purchasing intention of green packaged foods

Independent variable	R	P value
Attitude	0.374	0.000*

*P-value is significant at 0.05

A summary of the correlation of demographic variables and purchasing intention of green packaged foods indicates that age, gender and race have positive correlation and only income level do not have significant relationship with purchase intention of green packaged foods in Malaysia.

5.3. Regression test

In this study, multiple regression analysis is used to provide pattern of relationship between the set of predictors and the outcome factor (purchase intention). To meet the objective of the study two models are developed. The first model included only attitude as independent variable and the second model encompasses 5 independent variables (gender, age, income level, race and attitude) and one dependent variable (purchasing intention).

Table 3: variance explained by factors in purchasing intention of green packaged foods

model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374 ^a	.140	.133	.55654
2	.463 ^b	.215	.184	.53996

a. Predictors: (Constant), Attitude

b. Predictors: (Constant), Attitude, Age, Gender, Race, Income

The first iteration indicates R^2 of 14% while the second iteration's R^2 is 21.5% as shown in table 5. In the second model, demographic factors have been added which caused to an increase in R^2 . It can be interpreted that 21.5% of the variance in purchase intention of consumers is significantly explained by the independent variable of gender, age, income level, race and attitude.

The coefficient table indicates attitude as the most important factor in purchasing intention of green packaged foods followed by race. The two variables of attitude and race were significant factors to predict purchasing intention of green packaged foods among Malaysian consumers. The result implies that consumers with different attitudes and races may have different intention to purchase green packaged foods. The three main races of Malaysia that have been studied (Chinese, Malay and Indian) may have different attitude and perception toward green packaged foods.

Table 4: Factors predicting purchase intention of green packaged foods

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.678	.219		12.221	.000
	Attitude	.274	.059	.374	4.627	.000
2	(Constant)	2.399	.311		7.709	.000
	Gender	-.194	.113	-.162	-1.713	.089
	Age	-.085	.049	-.181	-1.727	.87
	Income	-.084	.054	.184	1.538	.127
	Race	.152	.053	.273	2.874	.005
	Attitude	.336	.066	.457	5.078	.000

6. Conclusion

The number of established packaging suppliers is increasing by selling a vast variety of green products. Although the concept of green packaging of foods is relatively new to Malaysian manufacturers but the consumption of green packaged foods is getting popular in Malaysia and the market is emerging dramatically similar to developed countries' trends. Packaging as the final tool to reach the consumers, transfers the message of green providers. The number of green packaging suppliers is increasing especially in food industry in Malaysia. These suppliers provide sustainable packaging by using recyclable and eco-friendly materials.

In order to segment the market of Malaysia for green packaged foods, marketers should be aware of demographics. The three factors of age, gender and race are predominant factors to segment and target consumers. Marketers will be able to seize the opportunity of “go green” in Malaysia by emphasizing on these three factors along with consumers attitude. Targeting consumers based on their attitude is a recommended strategy to be a green prior company in Malaysia.

7. References

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