THE INFLUENCE OF BRAND RECOGNITION, BRAND RECALL, AND TOP OF MIND TO CONSUMER BUYING DECISION

by:
Kalvin Langi

Faculty of Economics and Business,
International Business Administration (IBA) Program
University of Sam Ratulangi Manado
e-mail: calvin_cool27@yahoo.com

ABSTRACT

There are several important aspects that can influence brand awareness from the company to make their products have been known in the society, which are Brand Recognition, Brand Recall, and Top of Mind. These three aspects play an important role to create Brand Awareness for Consumer Buying Decision. The research objective is to analyze the influence of Brand Recognition, Brand Recall, and Top of Mind to Consumer Buying Decision in Aqua mineral water product on Manado. The population in this research is the people who consume Aqua mineral water in Manado. The Sample that was taken from Aqua customers is 100 respondents. The conclusion are brand recognition, brand recall, and top of mind show partially and simultaneously influence to consumer buying decision, the interpretation shows that the entire variables have strong relationship and the most significant influence to consumer buying decision is brand recall.

Keywords: brand recognition, brand recall, top of mind, consumer buying decision

INTRODUCTION

Research Background

Consumers are more likely to buy the product that has famous brand name. To always get a loyalty from customer and increasing the number of buyers from one product, the company must also pay attention on their brand awareness from the product. Brand awareness is also become as important parts in brand equity to the consumer namely as a decision making in purchasing the product. It plays a major role in consumers’ buying decision process because with advertisement and word-of-mouth from nearest friend can make the consumer thinking to decide for buy the product. Therefore, Brand Awareness is crucial to enhance product familiarity / popularity.

Aqua is one of the bottled mineral water products that are widely consumed by the society of Indonesia, especially in the Manado city. Aqua has become a famous brand in all realms and be a decision for the consumer to decide which mineral water product to buy. Aqua is the first pioneer of bottled mineral water in Indonesia that consumer more likely to buy because of the hygienist and also needed to fulfill the mineral in human body. Aqua has been born by the idea from the departed Tirto Utomo (1930-1994). He initiated the birth of the bottled water industry (drinking water) in Indonesia through PT Golden Mississippi on February 23, 1973. When the company success to go public in March 1, 1990 then PT Golden Mississippi name officially has been change into P.T. Aqua Golden Mississippi. On June 16, 1994, P.T. TIRTA INVESTAMA has been formed as a capital from AQUA production units that are spread throughout Indonesia and it is known now as the AQUA Group, with the total number of employees more than 7,400 people.
Table 1. Total Market Share Bottled Mineral Water

<table>
<thead>
<tr>
<th>Merek AMDK</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua</td>
<td>91.4%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Club</td>
<td>1.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Vit</td>
<td>1.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Ades</td>
<td>1.2%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Aquaria</td>
<td>0.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2 Tang</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Source: Indonesia Consumer Profile 2008, MARS Indonesia

Table 1. shown that Aqua mineral water product is control 91.4% market share of bottled drink water in Indonesia. This means Aqua was gaining a large of profitability from its brand, by diverted the consumer’s product mindset. Furthermore, even when someone wants to drink a mineral water, they always say Aqua brand name in the store, and also it can be purchased anywhere. It means Aqua has the most influence on consumer decision to purchase the mineral water to be drinking.

Research Objective
The objective of this research is to analyze the influence of:
1. Brand recognition to consumer buying decision for Aqua in Manado.
2. Brand recall to consumer buying decision for Aqua in Manado.
3. Top of mind awareness to consumer buying decision for Aqua in Manado.
4. To identify which of brand recognition, brand recall, and top of mind that has the most significant influence in consumer buying decision for Aqua in Manado.

THEORETICAL FRAMEWORK

Theories

Brand Recognition
Brand recognition is consumers’ ability to confirm prior exposure to that brand when given the brand a cue. (Moisescu, 2009).

Brand Recall
Brand recall is consumers’ ability to retrieve the brand when given the product category, the needs fulfilled by the category, or some other cues (Moisescu, 2009).

Top of Mind Awareness
Hapsari et al., (2011) added that Top of Mind Awareness has a strong correlation with certain product that has firstly perceived by consumers. Yet, certain product attributes and benefits will endow the product, particularly for activating consumer’s long term memory.

Consumer Buying Decision
Kotler and Keller (2009: 200) argued that marketing and environmental stimuli enter the consumer’s consciousness, and a set psychological processes combine with certain consumer characteristics to result in decision processes and purchase decisions. There are five-stage model in buying decision process. The buying process begins with the buyer recognizes a problem or need, and then they search for limited amounts of information that satisfies their perceived needs. After having the information, consumers use it to evaluate alternative brands in the choice set. Based on the evaluation results, consumer will form an intention to buy the most preferred brand. Finally, consumers take further actions after purchased based on their satisfaction or dissatisfaction.
Previous Research

Moisescu (2009) found that most of the consumers would prefer buying brands that are familiar to them, brands which they have heard of (aided brand awareness). Hoyer and Brown (1990) found that when inexperienced decision makers are faced with a choice situation in which a known brand competes with unknown brands they are considerably more likely to choose the known brand and brand awareness has important effects on consumer choice. Chi et al. (2009) found that: (a) the relations among the brand awareness, perceived quality and brand loyalty for purchase intention are significant and positive effect, (b) perceived quality has a positive effect on brand loyalty, (c) perceived quality will mediate the effects between brand awareness and purchase intention, and (d) brand loyalty will mediate the effects between brand awareness and purchase intention.

Research Hypotheses

H1: Brand Recognition, Brand Recall, and Top of Mind have simultaneously influence on Consumer Buying Decision
H2: Brand Recognition, Brand Recall, and Top of Mind have partial influence on Consumer Buying Decision

Type of Research

Hair et al. (2010:118) the concept of causality between several independent variables (X) and one dependent variable (Y) in research designs specifies relationships that are investigated in causal research studies and stated as “If X, then Y.”. So this research uses causal type of research because it will determine and investigate the influence of brand recognition, brand recall, and top of mind on consumer buying decision.

Place and Time of Research

The study was conducted in Manado from July – October 2013 and the survey started on August 2013.

Population and Sample

Population is “the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran and Bougie, 2009:262). An element of population is a single member of the population. The population in this research is the people who consume Aqua mineral water in Manado. Sekaran and Bougie (2009:263) a sample is a subset of the population. The sample in this research is customers of Aqua mineral water as many as 100 correspondents.
Data Collection Method
Primary data is information obtained first-hand by the researcher on the variables of interest for the specific purpose of the study (Sekaran and Bougie, 2009:180). The primary data obtained from the questionnaires distributed to consumer of Aqua mineral water. Questionnaires are distributed to respondents so they can respond directly on the questionnaire. Secondary data is information gathered from sources that already exist (Sekaran and Bougie, 2009:180). The secondary data is taken from books, journals, and relevant literature from library and internet.

Operational Definition and Measurement of Research Variables
1. Brand Recognition or Aided Awareness (X1) can also explained as a situation when the specific brand are given to recognize and the consumer can discriminate the brand like previous.
2. Brand Recall or Unaided Awareness (X2) can be defined as the ability from consumer to recall the product from memory and make a decision to buy when several product category are given to the consumer.
3. Top-of-mind (X3) is a brand that comes first in the top of mind of consumer think when they want to purchase some classification product.
4. Consumer buying decision (Y) is a decision from the consumer before they want to purchase according to their daily needs.

A scale is a tool or mechanism by which individuals are distinguished as to how they differ from one another on the variables of interest for a particular study (Sekaran and Bougie, 2009:141). Meanwhile, the Likert scale is used and designed to examine how strongly subjects agree or disagree with statements on a five-point scale (Sekaran and Bougie, 2009:152). In addition, the Likert scale has been chosen properly to consider that the data from decision making is based on the respondent’s Brand awareness of consumer decision making. Therefore, respondents will not have problems in understanding and filling out the questionnaire, and it is easy for the researcher to measure, interpreting and analyze the data. In this kind of scale, variables will be measured on five points of scale (1, 2, 3, 4, and 5).

Data Analysis Method

Validity and Reliability Test
Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure (Sekaran and Bougie, 2009:157). To analyze the validity of questionnaire, Pearson Product Moment is used. An instrument measure is valid if the instrument measure what ought to be measured. A construct with perfect validity contains no measurement error (Hair et al., 2010:157). Reliability test is established by testing for both consistency and stability of the answer of question. The reliability test in this research uses Alpha Cronbach. If Alpha is more than 0.6 then it is reliable.

Multiple Regression Analysis Method
Hair et al. (2010:318) Multiple regression analysis is a statistical technique which analyzes the linear relationship between a dependent variable and multiple independent variables by estimating coefficients for the equation for a straight line. The formula of multiple regression models in this research is shown as follows:

\[ Y = a + b_1x_1 + b_2x_2 + b_3x_3 \]

Where:
- \( Y \) = Consumer Buying Decision
- \( a \) = The constant, when all the independent variable equal to 0
- \( b_1, b_2, b_3 \) = The regression coefficient of each variable
- \( x_1 \) = Brand Recognition
- \( x_2 \) = Brand Recall
- \( x_3 \) = Top-of-Mind Brand
RESULTS AND DISCUSSION

Result

Validity and Reliability Tests

The test of validity by using a Pearson Correlation value shows that the correlation index in buying decision is greater than 0.3 and below the significance level of 5%; therefore, the data is considered as valid. In this research, it shows that Alpha Cronbach is 0.901 which is above the acceptance limit of 0.6; therefore, the research instrument is reliable.

Test of Classical Assumption

The VIF values of Brand Recognition (X1) are 1.693, Brand Recall (X2) are 1.689, and Top of Mind (X3) are 1.678 while the tolerance values of Brand Recognition (X1) are 0.591, Brand Recall (X2) are 0.592, and Top of Mind (X3) are 0.596. Since Tolerance Value is above 0.3 and VIF value <10 then the regression model are free from multicollinearity. The graph describing the plot spread above and below the number 0 (zero) on the Y-axis and it is not connected one to another, so this proves that the independent variable of Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) on Consumer Buying Decision (Y) are free from Heteroscedasticity. The points spread around the diagonal line and follow the direction of the diagonal line. This proves that the independent variable of Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) on Consumer Buying Decision (Y) in test normality assumption was met. The autocorrelation test using Durbin-Watson rate of 1.975 is in the free area from autocorrelation, so the regression model of the Influence of Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) on Consumer Buying Decision (Y) are free from Autocorrelation.

Multiple Linear Regression Analysis

Table 2. Coefficient Beta

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.567</td>
<td>.366</td>
</tr>
<tr>
<td>Brand_Recognition</td>
<td>.188</td>
<td>.090</td>
<td>.193</td>
</tr>
<tr>
<td>Brand_Recall</td>
<td>.429</td>
<td>.094</td>
<td>.418</td>
</tr>
<tr>
<td>Top_of_Mind</td>
<td>.251</td>
<td>.098</td>
<td>.234</td>
</tr>
</tbody>
</table>

Source: SPSS Data Analysis, 2013

The Multiple Linear Regression model is used to determine the influence of several independent variables on a dependent variable. Here is computed the influence of Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) on the Consumer Buying Decision (Y). The analysis output is described in table 2. From the result of the table above, the model is defined as:

\[ Y = 0.567 + 0.188 \times X_1 + 0.429 \times X_2 + 0.251 \times X_3 \]

From the multiple linear regression equation above, it can inform the interpretations are as follows:

1. Constant (a) 0.567 shows the influence in relationship between Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) factors to Consumer Buying Decision (Y) simultaneously, this means that if all independent variables are equal to zero, Consumer Buying Decision (Y) is predicted to be 0.567.

2. Coefficient value of Brand Recognition for variables X1 as big as 0.188. It means that if the variables Brand Recognition (X1) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve as big as 0.188 with assumption that the other independent variables from the regression model is fixed.

3. Coefficient value of Brand Recall for variables X2 as big as 0.429. It means that if the variables Brand Recall (X2) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve as big as 0.429 with assumption that the other independent variables from the regression model is fixed.
4. Coefficient value of Top of Mind for variables X3 as big as 0.251. It means that if the variables Top of Mind (X3) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve as big as 0.251 with assumption that the other independent variables from the regression model is fixed.

### Table 3. Coefficient Correlation (r) and (r²)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.720⁰</td>
<td>.519</td>
<td>.504</td>
<td>.4149</td>
</tr>
</tbody>
</table>

Source: SPSS Data Analysis, 2013.

The coefficient of correlation (R) is 0.720 meaning the level of relationship between independent and dependent variable is considered as a substantial positive relationship. In other words, Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) as independents variable and Consumer Buying Decision (Y) as dependent variable have a substantial positive relationship. The coefficient of determination (R²) is 0.519 which is the correlation coefficient quadrate \((0.720)^2 = 0.519\). R square is usually called the coefficient of determination which is 0.519 that means Consumer Buying Decision (Y) is able to be explained by Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) of 51% and the rest 49% are caused by other variables that is not examined in this study.

### Hypothesis Testing

**Table 4. F-Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>17.814</td>
<td>3</td>
<td>5.938</td>
<td>34.500</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>16.523</td>
<td>96</td>
<td>.172</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.338</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS Data Analysis, 2013

By using the level of significance of 0.05 (α = 0.05) and degree of freedom (df) = 3 then it found: 34.500 > 2.70. Because of the F value > F_table (34.500 > 2.70) it means Ha is accepted and Ho is rejected so Brand Recognition (X1), Brand Recall (X2), and Top of Mind (X3) influence Consumer Buying Decision (Y), simultaneously. Thus means hypothesis 1 is accepted.

**Table 5. t-Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand_Recognition (X1)</td>
<td>2.096</td>
<td>.039</td>
</tr>
<tr>
<td>Brand_Recall (X2)</td>
<td>4.542</td>
<td>.000</td>
</tr>
<tr>
<td>Top_of_Mind (X3)</td>
<td>2.548</td>
<td>.012</td>
</tr>
</tbody>
</table>

Source: SPSS Data Analysis, 2013

The calculations in the table 5, shown the interpretation as follows:

1. Brand Recognition (X1) toward Consumer Buying Decision (Y)

   The table coefficients above there is a sig value 0.039. Sig value is less than probability value 0.05 or 0.039 < 0.05, then H1 is accepted and H0 was rejected. Variable Brand Recognition (X1) have Tvalue = 2.096 and T_table = 1.984 which Tvalue > T_table (2.096 > 1.984), means that Brand Recognition (X1) significant influence variable Consumer Buying Decision (Y). The result showed that in general Brand Recognition (X1) would not improve or decrease Consumer Buying Decision (Y).

2. Brand Recall (X2) toward Consumer Buying Decision (Y)

   The table coefficients above there is a sig value 0.000. Sig value is less than probability value 0.05 or 0.000 < 0.05, then H1 is accepted and H0 was rejected. Variable Brand Recall (X2) have Tvalue = 4.542 and T_table = 1.984 which Tvalue > T_table (4.542 > 1.984), means that Brand Recall (X2) significant influence variable Consumer Buying Decision (Y). The result showed that in general Brand Recall (X2) would not improve or decrease Consumer Buying Decision (Y).
3. **Top of Mind (X3) toward Consumer Buying Decision (Y)**

The table coefficients above there is a sig value 0.012. Sig value is less than probability value 0.05 or 0.012 < 0.05, then H1 is accepted and H0 was rejected. Top of Mind (X3) have Tvalue = 2.548 and Ttable = 1.984 which Tvalue > Ttable (2.548 > 1.984), means that Top of Mind (X3) significant influence variable Consumer Buying Decision (Y). The result showed that in general Top of Mind (X3) would not improve or decrease Consumer Buying Decision (Y).

**Discussion**

Aqua mineral water has become the pioneer that selling bottled mineral water in Indonesia. Almost 90% of consumer in Indonesia has chosen aqua mineral water to be drinking. Because of that entire problem Brand Awareness is needed to be kept for making consumer to always create a decision for buy Aqua. Brand Recognition, Brand Recall, and Top of Mind are the three variables in Brand Awareness. On this research, the multiple regression methodology used to analyze shows a positive relationship between independent variable and dependent variable. It means that every 1-unit increase in each independent variable (X) will cause an increase in dependent variable (Y). The findings of this research also show that Brand Recognition, Brand Recall, and Top of Mind have a simultaneously and partially influence to Consumer Buying Decision, it means brand awareness influence consumer decision before they want to purchase.

The findings show that Brand Recognition has a significant influence to Consumer Buying Decision, because when the consumer wants to purchase some mineral water, they recognize the product that they have heard from advertising, word-of-mouth, and promotion. Thus, it was more likely to associate Aqua’s brand name with mineral water product. It showed that the most of the respondents have heard and known about Aqua. In addition, most of the respondents were arguing that Aqua constitutes mineral water with high quality and becomes their favorite product. These findings also supported by Moisescu (2009) that most of the consumers would prefer buying brands that are familiar to them, brands which they have heard of (aided brand awareness).

This research also found Brand Recall has become the most significant influence to the Consumer Buying Decision. When purchasing mineral water, which one is crossed in their mind is the product from PT. Tirta Investama that is mineral water product with Aqua brand. At the times when they have to choose from different mineral water brand, Aqua is always become first priority product to buy. Based on the respondent’s given opinions, that stated Aqua mineral water is a clean product and proved to be environment friendly so they will remember to make a decision to purchase repetitively.

Finally, the Top of Mind variable shows a significant influence to Consumer Buying Decision. It because after the consumers already recognize and recall to repeat purchase Aqua product, then it becomes the first in consumer thinking before decided for drinking some mineral water even though there are many mineral water products with a cheap price. The respondent wants to buy Aqua product with the reason that it is easy to be find and sold in many places which are stall, minimarket, and supermarket even in the restaurant. Aqua mineral water is very useful for health and there is no side effect. Aqua also can be consumed as much as possible for every day. The consumers also feel satisfied with the advertising and promotion from the Aqua mineral water product because it was compatible from what they get in Aqua.

It can be seen that the respondents are more likely to buy mineral water with Aqua brand, because the price is offered from Aqua mineral water product still affordable which lead Aqua is always become a decision to purchase and consume every day. Some of the Aqua consumer also said that they will not change the product to be drinking every day, they will always choose Aqua as the product for fulfill their needs. Also they love to decide for purchase Aqua mineral water because of quality, purity, and hygiene from Aqua that always have been guarded. Even young and old people are like to purchasing aqua mineral water product.

In overall, from all of those findings it can be said that brand awareness is very important to influence consumer buying decision for one product. Also when the product creates good brand awareness consumers can recognize and recall the products. Then, it will come simultaneously to consumer top of mind to decide the product for being purchased.
CONCLUSION AND RECOMMENDATION

Conclusion:
These conclusions come from the result and discussion part of this research. The result and discussion have determined the answers of those research problems.

1. Brand Recognition (X1) has significantly influence to variable of Consumer Buying Decision (Y). The result showed that if the variables Brand Recognition (X1) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve.
2. Brand Recall (X2) has significantly influence to variable of Consumer Buying Decision (Y). The result showed that if the variables Brand Recall (X2) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve.
3. Top of Mind (X3) has significantly influence to variable of Consumer Buying Decision (Y). The result showed that if the variables Top of Mind (X3) increased by one scale or one unit then the variables Consumer Buying Decision (Y) will improve.
4. The result shows that Brand Recall (X2) has the most significantly influence to Consumer Buying Decision (Y) for Aqua product in Manado.

Recommendation
Following with some recommendations from researcher:

1. The result of the research that have been obtained the Brand Recognition, Brand Recall, and Top of Mind influence Consumer Buying Decision for Aqua product in Manado, so the company should consider about their brand awareness through this three variable to maintain and improve consumers decision to always purchase toward Aqua mineral water product.
2. In this competitive era, there are so many new products with a good quality and cheap price that would affect the decision from consumers. If the company does not pay attention on their high brand awareness, maybe the company will lose the consumers gradually.
3. For the next researcher perhaps is important to add other variables measurements from Brand Awareness like Brand Dominance, Brand Knowledge, and Brand Opinion to get more accurate of data.

REFERENCES


