A Proposed Method for the Development of Marketing Mix of the Tea Drink Market

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Abstract

The objective of this article is to extend, revise and integrate design methods which are popular in product design for the development of marketing mix of the tea drink market. We cluster consumers' common needs by using the segmentation approach, and identify the significant functional requirements of the target segment. Then we propose a method for the selection of optimal elements of the marketing mix that satisfy the functional requirements by integrating the advantages of Suh's design axiom and conjoint analysis. An empirical study of Taiwan drink market was performed to validate our proposals.

Keywords: Marketing mix, Functional requirement

Introduction

The tea drink is popular worldwide nowadays. In the United States, the ready-to-drink tea segment boosted its share of the new age market to 22.6 percent from 15.3 percent in 1993 and it now challenges sport and energy drink (Supermarket Business, 1995). The cola kings (Coke and Pepsi) are fanning the flames under the fast-growing ice-tea business. In Japan, its big brewers are willing to pay heavily for more of the fast-growing tea market [13]. The iced tea is the fastest-growing drink sector in Europe, with a 45 percent increase in 1994 (Marketing, 1995). In Taiwan, tea drink has replaced most of the soft drink and functional drink and become the most popular leisure drink. Its market share was about 26.2 percent in 1997. Therefore, it would be useful to propose a method for developing the marketing mix of the tea drink market, especially for the marketing researchers and practitioners who are interested in this area.

Our method to develop the marketing mix originated from the methods of product design. Mostly, the description methods of product design are based on conjoint analysis. Many studies have used conjoint analysis to evaluate new product design [2]. Conjoint analysis has been popular since 1978 and during the early 1980s approximately 400 commercial applications per year were implemented based on conjoint analysis [19]. Besides conjoint analysis, Hauser and Clausing [6] described the house of quality which is a basic product design tool of the management approach known as quality function deployment (QFD), and Suh [17] presented a principle of design that is a simple and effective method which is often employed in the engineering domain.

Development of marketing mix has received considerable academic and industry attention. However, the majority of the literature focused on product design but did not extend it to the development of marketing mix. To meet the consumer's needs and wants for a successful product is necessary but not sufficient, especially, for our target, tea drink. The other three Ps (Price, Promotion, Place) should be taken into account. In our case, convenience purchasing is the major concern of most of the consumers, but it cannot be merely satisfied by a product. Lauternborn [11] thus proposed a new formula called the "Four C's:" "consumer wants and needs, cost to satisfy, convenience to buy and communication." Kotler [10] concluded that a winning company will be those who can meet customer needs economically and conveniently and with effective communication.

Moreover, McCarthy's 4P classifications of the marketing mix instruments may not fulfil the requirements of good taxonomy [18]. Any specific marketing activity or tool can meet several requirements simultaneously, and any specific requirement may also need to be satisfied by several marketing activities or tools. Shapiro [14] showed how companies using various sales promotional devices could move their merchandise through the distribution pipeline. In addition, he reviewed the elements of the marketing mix and provided insight into how these elements interact. He found three degrees of interaction: consistency, positive relationship among elements of the mix which is termed integration, and form of the relationship which is termed leverage. He also illustrated that promotion includes short-term price cuts for the trade and brand which is also part of communication [15].

A product requires packaging decisions to create such benefits as protection, economy, convenience, and promotion; it also requires labeling for identification and possible grading, description, and promotion of the product [9]. Product repositioning could be done by modifying the product, as well as through changes in advertising, pricing, or distribution [1]. Leigh and Gabel [12] proposed that a distribution strategy should ensure that the outlets carrying the product have an image that compliments that of the product. Then, according to the McCarthy's classifications, the 4Ps of marketing mix would be dependent on each other. Likewise, in order to tailor a product to the needs and wants of consumers in the target segment, a programme of marketing mix elements should be well-integrated, and would be better if the elements were taken into account simultaneously.

Although one key to marketing success is for a company to develop a consistent, integrated marketing mix that satisfies the needs of the target market better than its competitors, one problem that arises is that a marketing mix can be selected from a great number of possibilities. If product quality could take on one of two values, and product price is constrained to lie between $1000 and $2000 (to the nearest $100), and distribution and advertising are constrained to five alternatives, then 550 (=2x11x5x5) marketing-mix combinations are possible. To complicate the issue further, marketing mix decisions must also consider the alternatives of other elements of product and promotion mix.

In this article we extend, revise and integrate the methods that are popular in product design to the development of marketing mix of the tea drink market, but some reservations still exist. Conjoint analysis uses a simple approach to measure consumers' preference or utility to the product combinations, such as ranking the order of combination or rating the combination of the product by the Likert scale. Such methods are commonly applied in the psychological domain and fit the general criteria used in the evaluating scale, that is respondent understanding. However, conjoint analysis assumes merely main effects exist among attributes but no interactions [5]. Based on this assumption, orthogonal arrays or incomplete block design is generally employed to reduce the design complexity or reduce the number of product combinations. When the numbers of attributes are numerous, the orthogonal arrays and incomplete block design become very complex which would not be feasible due to cost or technological reasons [8]. Moreover, the substantial environmental correlation between the elements of the mix is inevitable. Such interaction effects could cause bias for selection of the optimal combination [4,16].

Hauser and Causing used QFD to translate customers' phrases into attributes by experts and designers. Customer attributes are prespecified and the existence of the interaction effect is assumed to void because of the prespecification of independence within attributes. However, as discussed previously, this is normally not true and the prediction error still exists. In addition, the house of quality has not been used in the development of marketing mix.

Suh's design axiom can be applied in designing a complex product like a car, a machine etc. These products are often difficult to manufacture and the design process should be precise. According to Suh's design principle the design is originated by the user's needs. The perceived needs are then transferred into functional requirements, followed by the selection of optimal design parameters to satisfy these functional requirements. This method reveals the users' needs and then maps it to product attributes. Two design axioms were proposed by Suh: the independence axiom and the information axiom. The independence axiom is to avoid interaction between product attributes and reduce the number of product combinations, which would make the design process simpler. However, Suh's axiom is not popular in the marketing domain, most examples are from manufacturing. His information axiom for the selection of optimal design parameters is based on the manufacturing point of view, not on the consumers' point of view. Also, it does not provide a simple approach for the measurement of consumers' preference or utility as applied in the conjoint analysis.

In this study, we were interested in eliminating the disadvantages of the above method and integrating its advantages to search for a suitable method that is useful in the development of the marketing mix of the tea drink market. Since Suh's design axiom makes the design process become simple and effective, and conjoint analysis proposes a simple method to measure consumer response, the objective of this article is to revise Suh's axiom and apply it in the marketing domain and then integrate the advantage of the conjoint analysis to construct a new method that suggests the optimal process to match consumer needs to the elements of the marketing mix of the tea drink. We began by gathering consumers common needs and wants in a tea drink and used the segmentation approach to identify the requirements of each segment and select a target segment. Then we applied our proposed method to search for the optimal elements of the mix which would satisfy consumer requirements. Finally, we examined our proposition by examining the different brands of the tea drinks which are popular nowadays in the Taiwan beverage market.

Theory and method

Suh's Principle of design

Suh [17] proposed product design must go through four domains: consumer domain, functional domain, physical domain, and process domain. The consumer domain is where consumer needs reside. These consumer needs must be mapped into functional requirements (FRs). Functional requirements are specific requirements which determine design objectives. These FRs are then mapped into the physical domain, where design parameters (DPs) are selected to satisfy the FRs. The DPs are then mapped into the following domain in terms of the process variables (PVs). Suh [17] then presented two design axioms to govern these processes. The declarative form of the axiom is:

Axiom 1: The Independence Axiom.
Axiom 2: The Information Axiom.

Axiom 1 states that during the design process, the FRs must be independent of each other and a DP must affect only its referent FR. Under this condition, there is no interaction between any two FRs or DPs, which would make the design process become much simpler. For example, Suh proposed a company was interested in developing a low cost, electrically conductive grinding wheel, which was required to provide corrosion resistance. Considering the perceived needs of the customers that the company was trying to satisfy, the FRs of the product were written as:

FR_1 = Electrical conduction
FR_2 = Bonding of abrasive particles
FR_3 = Corrosion resistance

The DPs of the product are:

DP_1 = Copper layer
DP_2 = Resin bond
DP_3 = Nickel layer

Each FR is only affected by its corresponding DP, and Axiom 1 is satisfied.

The independent FRs also reduce the combinations of DPs. For example, there are five FRs and each FR can be satisfied by three alternative DPs, without the independence concerns there are $3^5 = 243$ combinations of DPs. If the FRs are independent and each DP just affects its referent FR, then the combinations of DPs will reduce to 3x5=15, which would simplify selection complexity.

Axiom 2 states that among all the DPs that satisfy the independence axiom, the one with minimum information content is the best design. The term is used in a relative sense, since there are potentially many DPs that can satisfy a FR. Suh defined the information I as: $I = \log_2$(system range/common range). It means the larger the common range, the better the possibility of success. In any design situation, the probability of success is given by what the designer wishes to achieve, and what the system range is capable of manufacturing. The overlap (common range) between the designer-specified "Design Range" and the system capability range, "System Range," is the region where the acceptable solution exists [7]. Therefore, the larger the common range, the larger the probability of success.

For example, two car designs are under evaluation. In order to meet the FR, fuel efficiency, it can choose one of two DPs. The system ranges of the two DPs are: DP_A = 12.4~24.6 (km/L), and DP_B = 11.1~21.9 (km/L). The design range is determined by the average value of the entire system range = 17.5 (km/L). According to the information axiom, the information content for the fuel efficiency of car A is: $I_A = \log_2[(24.6-12.4)/(24.6-17.5)] = \log_2(1.72)$. The information content for the production efficiency of car B is: $I_B = \log_2[(21.9-11.1)/(21.9-17.5)] = \log_2(2.45)$. As I_A is less than I_B, the production efficiency of car A is better than car B, that is DP_A is selected [17].

Our proposed method of development of marketing mix

Identification of functional requirements

The design's objectives are determined by defining it in terms of specific requirements, which are called functional requirements. As our objective is to satisfy the customers' needs, economically, conveniently and with effective communication, to define the functional requirements, it is first to explore the customer's needs and then to transform them into functional requirements that meet our objective. The FRs act as a bridge between consumer needs and physical embodiments. For example, consumers state their needs in a tea drink as: refreshing and uplifting to the spirit, improve efficiency and effectiveness at work, relieve work pressure, relieve fatigue and replenish energy, quench thirst, taste good, strengthen and fortify health, natural and without any side-effects, convenient and saves time when purchasing, and economical. To meet our objective, we must transfer their needs and have the following FRs:

FR_1 = With luscious taste and good aroma
FR_2 = Lifts spirits and is refreshing
FR_3 = Wholesome and good for health
FR_4 = Quenches thirst
FR_5 = Easy to buy
FR_6 = Low price

With these functional requirements, the marketer would find it easier to search for the optimal DP for each FR.

For a thoughtful designer, the FRs not only involve the consumers' manifest requirements but also include the consumers' potential desires. To understand consumers' needs, recognition of the FRs is one of the most important steps in the design process, as DiAngelo and Petrun [3] proposed that functional requirements always play essential roles in product definition. The Customer Requirements and Task Specification (CRTS) method is one of the methods that was developed to meet the growing need for more precise user requirements. Using CRTS, DiAngelo and Petrun found customer needs and transformed them into functional requirements.

In our empirical study, the job of discovering consumers' needs and transferring them to functional requirements was done through focus groups and the job of identifying the independence and significance of the FRs was determined by a random sampling survey. We first reviewed the consumers' needs and their characteristics by conducting focus groups on two occasions. Each group had ten consumers participate. The results generated 24 items about the respondents' perceptions and attitudes toward tea drinks. Their Cronbach alpha scores were all greater than 0.8. We then used the third and the fourth focus groups, each composed of two marketers and eight consumers to verify the benefit needs and product attributes to design the questionnaire concerning functional requirements of the tea drink. A seven-point Likert scale was employed to measure the significance of each question and the FRs were identified as independent by the members of the focus groups.

Revision of independence axiom

Even though the independence of the FRs was approved by the focus groups the possibility of dissonance between consumers and members of the focus groups always exists. As our research product is a tea drink, most of customers can recognise the significance of each FR. To avoid dissonance, a random sampling survey can be employed, but after the survey, maintaining the independence of each FR may be difficult. Thus, we revised Suh's independence axiom as: Instead of keeping the independence of each FR, we look for sets of FRs which are independent, that is the FRs inside the sets are independent of the FRs outside the set. Then, we search for the combination of design parameters (DPs) which are only influenced by its referent set of FRs.

Revision of information axiom

The design process begins with the establishment of FRs and ends with the creation of physical embodiments called design parameters to satisfy these FRs. For the development of the marketing mix, the design parameters would be the elements of the mix. In our research, we used the seven-point Likert scale to measure the consumers' preference for each combination of DPs that satisfy a given set of FRs. Based on this, the system range can be defined as the distribution of the preference to a combination of DPs, and the design range is defined as above 4 points, or above 5 points, etc., so the common range would stand for the overlap between the system range and design range. However, the arbitrary destined design range may be questionable. For example, when the design range is defined as 5 points or above and the survey shows that there are 10 respondents whose response drops in the design range for DP_A and DP_B, but for the former one all the respondents select 7 points, but for the latter only five respondents select 7 points. There is no doubt that the former is better than the latter. Therefore, the response with the higher score should enjoy large weight. Due to this inference and to reduce computational complexity, we revise the information axiom into the following two steps:

Step 1: Look for the highest mean score of the combination of DPs that has a significant difference with the other combinations.

Step 2: If two or more combinations have no significant difference, the one with maximum variance would be the better one.

In our research, when comparing two combinations of DPs, not only did we compare the mean score but variance was also taken into account, which diminishes the risk of misjudgment. One should be significantly different from the others. If not, we compare their variances and under this condition, we prefer to choose the one which has a larger variance because there is a higher possibility that the larger proportion of consumers would select the higher score.

Empirical study

Random Sampling Survey

In this research, besides the focus groups, two stages of survey design were required. The purpose of the first stage survey was to (1) identify market segmentation factors, (2) recognise the independent sets of significant FRs. All the questions were associated with the seven-point Likert scale to measure consumer's preference or perception. The second stage survey was for selection of optimal combinations of DPs.

Segmentation Process

The empirical part of the study was conducted in a consumer segment of the Oriental tea drink market. The primary data of the first stage research was collected by scanning 1500 households. The members were randomly selected from the Taiwan area, and the sampling error was taken into account. The study was performed continuously from December 1995 to June 1996. At the end of the sampling period, 799 questionnaires were effectively returned, for a response rate of 53.27 percent. When the confidence coefficient is 95 percent, the effective data could make the research tolerated error less than 0.035. The functional requirements and measures of consumers' perceived needs were collected by the seven-point Likert scale. Demographic data and degree of tea drinking were collected by nominal scale.

The data on need perception was submitted to a principal component's factor analysis with a varimax rotation. Using an eigenvalue greater than one selection criterion, five factors emerge. These five factors accounted for 61.24 percent of the variance, and the Cronbach's alpha were all greater than 0.60 as shown in Table 1.

The factor score of each respondent was submitted to a K- mean cluster analysis. The purpose of the cluster analysis was to group respondents who had similar consumer needs in a tea drink. Five clusters emerge with 152 (19.02%), 176 (22.03%), 174 (21.78%), 105 (13.14%), and 192 (24.03%) members. The cluster centre means are presented in Table 2.

Through analysis of variance (ANOVA), we found significant differences on every factor dimension of benefit need, and the discriminate analysis result was also significant, where the ratio of correct classification was 95.87 percent (see Table 3 and Table 4). The scores of attention to functional requirements varies among the different segments. Cluster 4 was composed of individuals who were not interested in the functional requirements of tea drinks.

The Characteristics of the Segments

Segment 1 was the quality seeker. They considered the quality factor to be more important than other factors, and paid attention to the functional requirements of quality, refreshing, luscious taste, and good for the environment. Their ages were 10- 19 (31.6%) and 50-59 (13.2%) years old, 60.5% were male, and more than 55.3% used the product twice a week.

Segment 2 was the taste seeker. They considered the benefit need factor of flavourful taste to be more important than others, and found the following functional requirements to be important: quality, luscious taste, quenches thirst, good for health, and good for the environment. They were mostly 30-49 (42.7%) years old, 60.2% were female, and more than 52.3% used the product less than once a month.

Table 1 Factor analysis and reliability

Factor and Item	Factor loading	Eigenvalue	Cumulative percent of variance	Cronbach's alpha
1. Refreshing and fortify health factor				
1.Drinking tea can refresh and uplift the spirit	.6962			
3.Drinking tea can strengthen and fortify health	.7256			
5.Drinking tea provides a dental hygiene function and won't cause tooth decay	.5882			
10.Drinking tea can make you feel natural and fresh	.5760			
11.It can improve efficiency and effectiveness while drinking tea of work	.7415	7.722	35.10	0.8618
12.Drinking tea can relieve fatigue and replenish energy	.6942			
15.Tea drinking is good for health for it helps to decrease blood sugar and blood fat	.6324			
2. Quality factor				
16.Tea is the best natural drink without any side-effects	.5018			
17.I drink it because my family and friends all drink it	.5842			
18.Because it's not necessary to boil water and make tea, it has become the major beverage of my family	.7055			
19.Drinking tea is associated with a sense of elegance	.6425	1.725	42.95	0.8153

Table 1 factor analysis and reliability (continued)

20.For economic reasons, ready-to-drink tea is cheaper than tea you need to prepare	.6343			
21.The tea drink's quality is stable and trustworthy because during processing it is pasteurized	.6161			
22.A tea drink is the best beverage when entertaining guest due to its taste and qualitative features	.6606			
3.Taste flavor factor				
7.Tea tastes more flavorful than other beverage drinks	.6115			
23.Drinking tea relieves work pressure	.9300	1.454	49.56	0.6851
24.In comparison with other beverages I prefer tea drinks	.9300			
4.Fashion factor				
4.Drinking tea represents a trendy and fashionable behavior	.7349			
8.Drinking tea is a present-day tendency	.7296	1.367	55.78	0.6988
9.Tea drinking represents the young and energetically active	.6616			
5.Convenien and save time factor				
2.Tea drinks are ready to drink convenient to use, not necessary to infuse	.7706	1.202	61.24	0.6000
13.It's suitable for modern living because it saves time, do not have to brew tea	.7463			

Table 2 Cluster analysis (cluster mean)

Cluster	N	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	152	-0.0477	1.3322	0.3277	-0.1199	-0.1774
2	176	-0.2593	-0.4907	0.8249	-0.6805	0.5502
3	174	-0.3051	-0.0565	-1.0965	0.1104	0.6078
4	105	-0.0084	-0.4413	-0.7190	-0.5742	-1.4021
5	192	0.5565	-0.3124	0.3713	0.9327	-0.1480

Table 3 Analysis of variance for factor dimension

Factor name	Cluster mean 1	2	3	4	5	F	P
1.Refreshing and fortify health factor	-0.0477	-0.2593	-0.3051	-0.0084	0.5565	24.56	**.000
2.Quality factor	1.3322	-0.4907	-0.0565	-0.4413	-0.3124	156.55	**.000
3.Taste flavor factor	0.3278	0.8249	-1.0965	-0.7190	0.3713	227.34	**.000
4.Fashion factor	-0.1199	-0.6805	0.1104	-0.5742	0.9327	111.77	**.000
5.Convenient and save time factor	-0.1774	0.5502	0.6078	-1.4021	-0.1480	142.12	**.000

**:p<0.01

Table 4 Discriminant function coefficient

Factor	Function 1	Function 2	Function 3	Function 4
Factor 1	0.3971	0.1433	-0.5497	-1.0746
Factor 2	3.2491	-0.6426	0.5777	-0.2337
Factor 3	-1.0991	4.1970	-0.4394	-2.7087
Factor 4	1.0095	-1.3266	0.9948	-2.5579
Factor 5	-1.5152	0.3361	3.4632	-2.3023
Constant	-0.0138	0.1382	-1.2648	1.5904

Wilks' lanbda=0.079

F =150.53 significant=.000

Correctly classified=95.87%

Segment 3 was the convenient and time saving seeker. They considered the benefit factor of convenience and time saving to be more important than others, and regarded the functional requirements of quality, luscious taste, low price, and good for the environment as important. They were 10-29 (61.5%) years old, 55.2% were male, and more than 52.3% used the product less than once a month.

Segment 4 was the no preference group. They were not interested in tea drinks or the functional requirements of tea drinks. They were 10-19 (29.5%) and 40-49 (21.0%) years old, 54.3% were male, and more than 62.0% used the product less than once a month.

Segment 5 was the health and fashion seeker. The benefit need factors of refreshing, healthily and fashionable were their major concerns, and they paid attention to the functional requirements of quality, luscious taste, easy to buy, and good for the environment. They were 10-29 (27.1%) and 50-59 (12.0%) years old, 50% were male, 50% were female, and more than 48.5% used the product twice a week.

The results of the segmentation are shown in Table 5.

Target Market Selection

According to the analysis of segmentation, segment 5 has the biggest size, highest growth rate, and most of them are heavy users. In addition, the benefits sought and the functional requirements are multitudinous, and most of the consumers in this segment are sensitive to the elements of the product mix. We therefore selected segment 5 to be our main focus segment.

Functional Requirement Identification

The independence axiom is the design principle for the selection of the set of FRs. In our case, we applied the factor analysis with varimax rotation to find out three independent sets of FRs in the target segment. This means that some of the ten FRs have a dependent relationship, but they can be classified into three independent groups, as shown in Table 6.

The first set includes four FRs which are then mapped to product quality and distribution. The second set includes three FRs related to the product features. The third set involves three FRs related to promotion, price, and product function. Considering these three sets of FRs, we then search for the optimal DP combinations.

Table 5 Characteristic of segments

Item	Segment name: 1. Quality seeker (n=152)	2. Taste seeker (n=176)	3. Convenient and time saving seeker (n=174)	4. No preference group (n=105)	5. Health and fashion seeker (n=192)
Benefit sought	Quality	Tastes flavorful	Convenient Save time	No	Refreshing Fortify health Fashionable
Functional requirement	Refreshing Quality Luscious taste. Good for the environmental.	Quality Luscious taste. Quench thirst. Good for health. Good for the environmental.	Quality Low price. Good for the environmental. Luscious taste.	No	Quality Luscious taste. Good for the environmental. Easy to buy.
Age	10-19 50-59	30-49	10-29	10-19 40-49	10-29 50-59
Sex	Mostly male.	Mostly female.	Mostly male.	Mostly male.	Both
Degree of drink	Heavy user	Light user	Light user	Most light user	Heavy user

Selection of Design Parameters

In order to select the optimal combination of DPs to its' referent set of FRs, we recognise all possible combinations of DPs. There are 16 combinations for the first set of FRs, eight combinations for the second set of

Table 6 The functional requirements of the target market

FRs set and Item	Factor loading	Eigenvalue	Cumulative percent of variance	Crocbach's alpha
First set of FRs				
2.Good in quality	.6834			
3.With luscious taste and good aroma	.7619	3.63	36.3	0.8018
8.Convenience in drinking and carrying	.5761			
9.Easy to buy	.7604			
Second set of FRs				
6.Quench thirst	.7820			
7.Wholesome and good for health	.7668	1.48	51.2	0.7657
10.With the feature of good for the environmental	.5769			
Third set of FRs				
1.Fashionable	.7345			
4.Low price	.6973	1.01	61.3	0.4752
5.With lifting spirit and refreshing function	.5787			

Table 7 Compare of DPs between three brands

Optimal DPs	Brand X	Brand Y	Brand Z
First combination of DPs			
No antiseptic, artificial sweetness, and heavy metal	No antiseptic, artificial sweetness, and heavy metal	No antiseptic, and no artificial sweetness only	No antiseptic, and no artificial sweetness only
Oolong tea	Oolong tea	Oolong green tea	Pao-Chung tea
Tetrapak	Tetrapak	Mostly pull pop	Pull pop
Intensive distribution	Intensive distribution	Intensive distribution	Selective distribution
Second combination of DPs			
Moderate thickness	Moderate thickness	Moderate thickness	Thickness
Includes vitamin B,C	Includes Vitamin C	No vitamins included	No show
Material of package is alumin foil	Alumin foil	Alumin foil	Aluminum
Third combination of DPs			
Via T.V. commercial (Ad. expenditure)	T.V. advertisement (US$6,547)	T.V. advertisement (US$5,703)	A little advertising (small volume)
Price-off	US$ 0.48(350cc)	US$ 0.50(350cc)	US$ 0.55(350cc)
Caffeine weak	Caffeine is about 131ppm	Caffeine is less than 160ppm	Caffeine is about 200ppm

FRs, and eight combinations for the third. Through the second stage survey, we ask the preference on the 7-point Likert scale to 350 respondents in the target market. After applying the revised version of the information axiom, we summarise the results of each optimal combination of the DPs in Table 7.

Empirical Examination

We analysed three brands of tea drinks: two of them (brand X and Y) are well known in the target market and the other (brand Z) is not. The successful brand exhibits most of the optimal DPs indicated by our research. Contrarily, the one which does not exhibit as many optimal DPs has failed in the target market. According to the brand selection of the target market, 30.2% of target consumers have no loyal brand, about 22.9% of them are loyal to brand X, and about 7.3% of them are loyal to brand Y. Brand Z has no share in this segment. Results comparing brand loyalty are shown in Table 7.

Conclusion

Market segmentation is one of the most important concepts in marketing research, and by it, a company can customise their products and marketing mix to satisfy each specific requirement. Many studies have shown that the benefit segmentation is a useful approach to the grocery market. The benefits sought include consumer needs and product features, because customers' requirements to a product are integrated and not single. If a marketer wants to launch a product successfully to satisfy his target customers, the marketing mix should be developed simultaneously. Thus we have presented a method from categorising consumers' requirements to the development of the marketing mix. This model could link consumers' functional requirements and elements of the mix with needed benefits. Through it, a manager could develop a popular and successful programme and the model should help marketers assess and plan the overall effective marketing mix.

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