

Factors in manager vs customer choice of supermarket location in Taiwan

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ABSTRACT

Economic growth in Taiwan has been stimulating consumer purchasing power in recent years. The boosted consuming ability of Taiwanese has brought the development of retail business into a whole new era. Taiwan Fresh Supermarket, a supermarket using marketing strategy as its management philosophy, has caught attention since this type of philosophy and how consumers feel when shopping in the supermarket has previously been little researched. The initial phase of this research chose location elements as the principle, interviewed managers of three stores, and identified the major factors that affect the choice of store location. The second phase collected questionnaires from consumers and used analytical methods to measure and test the significant of cross relationships between environmental factors, location-selection principles, and the comparative ratings of the three stores.

1. Introduction

1.1 Research Background and Motive

The stable economic development of Taiwan has demonstrated the huge potential consuming ability of the Taiwanese populace. While people's consuming ability has a positive relationship with retail industry, there are more and more enterprises willing to invest in different types of retail channels. From the management point of view, competition from wholesale stores' low price strategy and convenience stores' ready accessibility strategy have reduced

the growth rate of supermarkets. Through several development stages, Taiwan Fan Kun Supermarket (TFKS) has thirteen stores in Taichung County, fifteen in Taichung City, five in Zhanghua County, and five in Nantou County. TFKS used to achieve prosperity in the supermarket industry but is now facing several challenges from various competitors.

Experimentation in marketing strategy in recent years has rendered traditional marketing strategies unsuitable. Economic growth has raised GDP per capita and made consumers demand more than mere product quality. Business managers have to be able to provide virtually customized

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products and services in a fine-tuned manner in order to attract customers and stay ahead of the competition.

What customers look for nowadays is no longer the product itself, but the content of the product; what businesses offer today should not be the product itself either, but the philosophy, attitude, style, or even values the products make consumers think of to attract the target market. This trend of delicate multi-attribute provision also affects the way a supermarket is managed, which promotes the market segmentation of TFKS, since its major management philosophy has been to offer customers imported goods and superior services within a comfortable environment.

1.2 Purposes

TFKS is one of the businesses that utilizes the experiencing marketing strategy. However, no previous research has been conducted relative to TFKS customers' shopping experiences. Therefore, the purpose of this paper is to compare the differences between the perspectives of the staff of three case companies and their customers about location factors, especially in terms of operational logistics. More specific purposes including the following:

- 1) Investigate and collect TFKS's current segmentation situation and analyze different stores.
- 2) Interview professional managers to find out the weighted percentage of priority location factors.
- 3) Pass out questionnaires to customers to find out if location factors received from professionals agree with those filled out on the questionnaires.
- 4) Investigate how satisfied customers are with TFKS's services and quality.
- 5) Synthesize the results of the four stages above to generate possible logistical strategies for location marketing.

1.3 Scope fo the research

- 1) TFKS specializes in fresh vegetables, meat, seafood, and other

general merchandise.

- 2) As there are currently 38 Taiwan Fresh Supermarkets located in three counties and cities in Taiwan, this paper chooses one from each county and city.

- 3) Interviewed individuals include nine direct managers (three from each of three stores) and 134 effective sample questionnaires filled out by customers in the supermarket.

This paper investigates the responses of professionals and customers using the Analytical Hierarchy Process (AHP) to analyze key locational factors that affect logistic operation. To do so, it interviews professionals and collects customer opinions for cross reference.

2. Conceptual Framework

2.1 Literature Review

The paper divides the literature into two parts: the definition of retail trade, and the definition of customer satisfaction.

I. Definition and types of retail business

Any organization -- whether manufacturer, wholesaler, or retailer -- that involves selling is a retail business (Kotler *et al.*, 2000). Retail business has changed substantially with the evolution of the economy. Types of retail business include department stores, specialty stores, supermarkets, drugstores, convenience stores, and discount stores (Kotler *et al.*, 2000).

II. Definition of Supermarket in the United States

The industry classification standard in the United States defines a supermarket as a place which not only sells fresh vegetables, fruits, cooked or raw meats, bakery, snacks, and other normal goods; it is also a place where customers choose goods based on their own needs. The owners of supermarkets may be independent retailers, chain stores, or franchisers.

III. Definition of Supermarket in Taiwan

The introduction of supermarkets in Taiwan replaces the role traditional markets play. In order to provide higher quality, fresh, and clean merchandise and stabilize the image of high class markets, the supermarket emphasizes an atmosphere where a large variety of products are always available to meet customers' need to "buy all at one place." For these types of markets, a low-pricing strategy is usually the management principle.

IV. Customer satisfaction

According to marketing experts, it is five times cheaper to keep an old customer than attract a new customer (Kotler, *et al.*, 1996). Based on research by Reichheld and Sasser (1990), if an enterprise is able to keep 5% more of its customers, the sales will have a 25% to 95% growth. Customer satisfaction will be the key factor to a business's success, since whether or not customers are satisfied will directly affect their brand loyalty, the frequency of complaints, the company's market share, and its business image (Muller 1991),.

Since Cardozo introduced the concept of customer satisfaction in 1965, experts still have not arrived at a common consensus on the meaning of the term. Nonetheless, customer satisfaction may be defined in several different aspects:

A. Define by range

Some experts think customer satisfaction is an emotional reaction related to a specific transaction (Howard and Sheth, 1969; Cronin, 1992), while some consider satisfaction as an instant emotional reaction after using the product in a given circumstance (Woodruff *et al.*, 1983). Satisfaction can also be considered from a unified point of view. Woodside and Daly (1989) think satisfaction is an overall attitude based on shopping experiences. Anderson *et al.* (1994) hold an opinion that satisfaction is accumulated based on a) customers'

purchasing and spending experiences and b) an overall evaluation of the business; and that satisfaction can be divided into two types: specific transactions and accumulation. Specific transaction represent how customers expect to receive a specific service or good from the business, while accumulation satisfaction includes customers' previous shopping experiences with the company and predictions of the company's upcoming services.

B. Define by nature

Engel *et al.* (1973) advance the idea that consumer behavior is based on customers' previous knowledge and evaluation experiences. Cadotte *et al.* (1987) think consumers have the habit of constructing a comparison standard based on previous purchasing experiences for future use; through such comparisons there may be positive or negative reactions that ultimately affect how satisfied customers are.

Howard and Sheth (1969) believe that satisfaction is a mixture of evaluation and comparison, based on customers' knowledge of how much to pay (sacrifice) and how much one receives (benefit), and whether the difference between costs and benefits is appropriate. From an emotional point of view, satisfaction is a temporary emotional reaction (Oliver, 1981). Westbrook *et al.* (1983) stated that consumers tend to express their feelings in using a product with emotional sentences. Whether the product is purchased for rational or emotional purposes, the transaction itself will always stimulate consumers' emotions and affect how satisfied the consumers are. Some scholars consider that the judgment of satisfaction is based upon a mixture of knowledge and emotion of the customer; therefore, satisfaction is not only an emotion, but also an emotional evaluation and a set of judgments based on knowledge. However, a common agreement of the definition of

satisfaction has not been made yet by scholars with different perspectives.

2.2 Location Theory

In order to keep abreast of the trend in fine-tuning to customer needs, more and more supermarkets use an experiential strategy as their major marketing tactic. Traditional supermarkets' management philosophy is to consider all costs in a scientific way: how big the supermarket should be, how price should be set, and how merchandise should be displayed. This approach is based on the assumption that consumers are rational, so that management level can pursue maximum profit with minimum cost. Under this type of management principal, what customers can experience in the supermarket is limited.

Compared to many of the traditional supermarkets, TFKS manages their businesses by putting themselves in the customers' shoes. The management principal is based on customers' feelings, quality of life, and style of design. This approach creates a unique value and style in customers' eyes based on the belief that customers consider many non-price attributes of the products they buy. Keeping products fresh in the supermarket and guaranteeing their quality have been the major principles of Taiwan Fresh Supermarket in segmenting themselves from other competitors. Therefore, a new location has to be evaluated by the following standards before making the final decision to build or acquire a store:

- 1) How do customers come to the supermarket? What is their transportation?
- 2) The category of the soil has to be either for commerce or residential.
- 3) Ensure adequate population density within the area.
- 4) Investigate similar competitors within the range and calculate possible sales and rent.
- 5) Locate on the major streets to increase the flow of customers. If one has to build on a secondary road, the

neighborhood has to have dense population.

6) Avoid locating in areas with a dense distribution of drink shops and vendors.

7) Locate at plazas within one hour driving distance of the distribution warehouse.

8) Locate at plazas which have competitors' flagship shops.

3. Methodology and Data

3.1 Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process (AHP) was invented by Tomas L. Saaty, professor at the University of Pittsburgh in 1971, with the initial purpose of helping the Department of Defense of the United States in their decision-making processes. AHP is especially useful for issues involving several uncertain factors which may affect each other, and is able to simplify and systemize complicated and non-systematic issues, dissolve the issue from top-down, and quantify options for further evaluation.

This paper uses AHP to analyze factors affecting the choice of location for a supermarket. It uses AHP to pair questionnaires collected from professionals to find out the weighted average of factors, and how important each factor is in managers' point of view. The result of analysis show the priority elements and secondary factors managers take into account in choosing the location of a new supermarket.

3.2 Research methods

This paper intends to find out how important locational factors are in Taiwan's supermarket industry, and whether consumers' visiting rate is affected by these factors. TFKS is chosen for its people-oriented philosophy of offering customers a comfortable environment, imported goods, and superior services in the central part of Taiwan. Three stores were chosen, one located in

the urban, one in rural, and one in the semi-urban area. Managers and customers of the three stores were interviewed and questionnaires were filled out to test whether or not locational factors affect management philosophy or consumer behavior.

The purpose of the questionnaire was to reveal customers' feelings about shopping in TFKS. The questionnaire comprised three parts: the degree of agreement with the selected locational factors, consumer satisfaction, and personal information. Interviews with managers and experts employed the AHP research method, Expert Choice software to analyze selected locational factors based on thirteen TFKS in central Taiwan. Through cross-comparison, factors were categorized based on their relative weight of importance. Customers' questionnaire data were collected and analyzed by SPSS (Statistics Package for Social Science), which allows researchers to skim and analyze massive amounts of information at the same time. The followings are summaries of each part of the questionnaire:

3.2.1 Agreement degree of selected location factors

This part is divided into four sections: locational factors, transportation factors, exterior factors, and interior factors. Compared to the other parts of the questionnaire, this section is more academic and professional; this is intentional in order to test how much understanding consumers have when it comes to TFKS circumstances, and the chain's exterior and interior working environment.

3.2.2 Consumer opinion

This part is based on how customers feel after making purchases in TFKS, their overall experiences, evaluation, and satisfaction level. Questions on the questionnaire are closed-form based on the products, services, and information of the

supermarket; and categorized in different sections to help the managers of Taiwan Fresh Supermarket make better strategic decisions in the future.

3.2.3 Basic Information

The purpose of asking customers to fill out their basic personal information is to understand the major target customers of the supermarket and their economic background. Questions such as gender, age, education level, income, and vocation are multiple choice questions. Age is categorized into nine ranges. Professions are divided into seven categories, including business, military, student, services, self-employed, teacher, and others.

The above three sections were designed for customers to fill out right after they have finished shopping in the supermarket, while they still remembered their shopping experiences. The questionnaires were collected on the spot by the researchers. About 150 questionnaires were handed out, of which 134 are used in the present analysis.

4. Empirical Results

4.1 The structure design of location factors

The processes of data collection and analysis are based on the research purposes and analytical methods described above. Satty suggests that the number of elements included be five to seven; fewer or more than this number may cause processing difficulty, the standard set in the research may have to be further adjusted, and/or have to do re-testing during the experiment. Based on Satty's suggestion, this paper systemizes and breaks down the development factors of the supermarket into four layers, including geographic elements, transportation elements, exterior elements, and interior elements.

4.2 AHP Results

The Expert Choice system analysis results show that professionals and managers think transportation elements play the most important role among all the location factors (0.167), followed by population distribution (0.130) and floors (0.081). These numbers show how important each role plays in these professionals' mind.

The Expert Choice system analytical results show that customers think transportation elements play the most

important role: notably, near a major road (0.206), road safety (0.152), and sign location (0.121). These numbers indicate the importance of factors when customers choose a supermarket. Table 4.1 shows the weight of each factor.

4.3 Consumer survey results

The questionnaire section of customers' degree of satisfaction with Taiwan Fresh Supermarket is shown in Table 4.2.

Table 4.1: plural supermarket map location factors

	Professionals	Customers
Public Transportation	.167	.083
Population Distribution	.130	-
Floors	.081	.043
Location Situation	.080	.056
Land Price	.078	-
Plaza Analysis	.066	-
Ceiling Lights	.064	.021
Road Safety	.058	.152
Sidewalk Space	.051	.130
Major Roads	.031	.206
Snack Venders' Centre	.030	.102
Size of Parking Structure	.028	.235
Cooked Good Section	.027	.065
Freeway	.025	.072
Measure of Area of the Land	.022	-
Categorization of Goods	.021	.089
Next to Watercourse	.016	.002
Next to Traffic Lights	.009	.001
Exterior of the Building	.007	.069
Advertising Information	.004	.101
Sign Location	.002	.121

Table 4.2: Customers' degree of satisfaction

	Very Satisfied	Satisfied	No Opinion	Unsatisfied	Very Unsatisfied	Overall opinion
Manufacturing date	0.67%	1.33%	16.67%	63.33%	18.00%	79.33%
Air-conditioning	0.00%	3.33%	20.67%	55.33%	20.67%	78.67%
Freshness	0.00%	2.67%	20.67%	59.33%	17.33%	78.27%
Interior Design	0.00%	2.67%	23.33%	54.00%	20.00%	78.27%
Brightness	0.67%	6.67%	18.00%	51.33%	23.33%	78.00%
Product Quality	2.00%	2.00%	23.33%	60.00%	12.67%	75.87%
Service Attitude	1.33%	5.33%	21.33%	58.67%	13.33%	75.47%
Crowd	0.00%	6.67%	32.00%	48.00%	13.33%	73.60%
Product Material	0.67%	6.67%	42.00%	48.00%	2.67%	69.07%
Product Price	2.67%	21.33%	34.67%	32.00%	9.33%	64.80%
Out of date products	81.33%	18.67%	0.00%	0.00%	0.00%	23.73%

5. Conclusions and Suggestions

5.1 Conclusions

The management of a supermarket is no longer a solitary fight; since Taiwan joined World Trade Organization (WTO), there are more and more threats of new entrants for the retail industry. However, membership in the WTO can also benefit the industry by bringing in new opportunities. Therefore, the new trend of competition among franchising businesses will soon become an information war.

With the increased demand for products of quality, a renewal of the consumption concept, and the overshadowing of lowest price as a primary factor in purchase choice; Taiwanese consumers now include their emotions, values, personal tastes, style, and personal evaluation in each transaction made. All these symptoms show that the experiential era is coming. A supermarket should give more weight to consumers' emotions and the additional value of

product besides the product content itself. The supermarket has to be readjusted and relocate its position within the industry. The purpose of the paper is therefore to understand consumer feelings and experiences in making purchases in supermarkets, and to analyze the three TFKS's exterior, interior design, services, and so on.

Based on the statistics, customers who visit TFKS's are younger, with higher education, and more independent single females compared to customers in other traditional supermarkets. This phenomenon represents the rise of individualism, and the fact that female are becoming the leaders of the trend and fashion in consuming behavior. When women have more opportunities in the workplace, they are also able to become economic independent, and willing to spend to comfort themselves. The higher the educational degrees that consumers hold, the more selective they are in including environment and quality in each

transaction. The marketing department of a supermarket should be able to analyze and identify customers' needs and preferences within the range of 21 to 40 years old, mostly with a business or service related profession, to stay ahead of the competition in the supermarket industry.

The marketing department should plan out in detail appropriate strategies that focus on rush hours, including how the products will be displayed, the product combinations offered on the stall, the lighting and overall atmosphere customers feel, and the items offered at reduced price. In addition, since customers spend an average of 30 minutes to one hour on each shopping visit, managers must plan how to appeal to their mind and offer them a complete and positive shopping experience in a correct way. Furthermore, what purchasing decisions customers of different ages will make should also be taken into consideration in the strategy forming process.

Based upon the interview survey collected from professionals and managers, public transportation, population distribution, and floors are the most important factors in location selection, far ahead of location or land price. However, customers are most concerned with proximity to major roads, road safety, and sign location. Therefore, it is observed that both parties think population transportation and population distribution are the two important factors of the 21 given on the questionnaire.

5.2 Suggestions

This paper uses questionnaires to interview customers making purchases in TFKS to ensure they can still recall their shopping experiences; however, in order to further guarantee the completeness of the research results, other research methods such as direct observation of consumers' behaviors, or thorough interviews on a one-on-one basis may be pursued in the future to increase the richness and reliability of the research.

There are only three TFKS interviewed in this research. Continuous research can be expanded to other stores in Taiwan; while this paper only focuses on consumers' concepts of location selecting, continuous research can focus more on consumers' purchasing behavior and other related surveys.

Finally, this paper only surveyed a few managers, professionals, and customers; if larger samples could be collected, with the cross reference received from the professionals' point of view, a greater variety and deeper validity of the results should be more beneficial to both future researchers and the TFKS itself. Therefore, continuous study can focus on how to collect more data on larger sample populations, and how to blend the values of consumers and professionals for quantitative research.

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