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The Images of Integrated Fresh Pork Retailing Centers and Its Influence to Consumers' Behavior in Taiwan

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Jing-Shing Ho and Chu-Jen Chen*

Abstract

This research analyzed influences from store images of the integrated fresh pork retailing centers in Taiwan. Important and satisfactory store image characteristics are discussed. Several images of the retailing centers exhibit statistically significant differences of perceptions between important and satisfactory store characteristics. Purchasing behavior and demographic factors explain some differences of consumer perceptions. Based on the results, this research suggests the integrated fresh pork retailing centers focusing on the issues of selecting locations, improving sanitary standards of meat products, and adopting marketing-oriented management.

Key words: Store images, Consumer behavior

INTRODUCTION

The swine industry in Taiwan is heavily affected by the eruption of the foot-and-mouth disease occurred in March 1997, and intention to join the members of the World Trade Organization. Based on "Improving Swine Industry Competition Task," the Council of Agriculture plans to ensure an efficient production and marketing system of pork, to establish contract production and market integration, and to compensate farmers' associations for coordinating breeding, medicines, feed, slaughtering, contract processing, marketing, and retailing. In order to increase management efficiency, "coordinated managing system" is proposed to integrate the swine industry vertically and horizontally. Since 1997, the agricultural administration has established 16 integrated fresh pork retailing centers in Taiwan to introduce quality pork and to achieve sanitary standards of pork products.

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The objectives of this study are following: (1) analyze the consumers' evaluations of the integrated fresh pork retailing centers, (2) examine the differences between consumers' expectations and perceptions of the integrated fresh pork retailing centers, (3) investigate influential factors to the store images, and (4) utilize the differences between consumers' expectations and perceptions to manage the integrated fresh pork retailing centers.

RELATED RESEARCH

1. Definition of Store Images:

"Images" were first mentioned in Boulding (1956), using segmented and insufficient information to assemble arbitrary perceptions. Utilizing concepts of images in retailing, Martineau (1958) believed that consumers could use the images of stores as classifications, based on functional qualities and psychological attributes. Arons (1967) interpreted store images as characteristics consumers used to symbolize products, prices, store outlays, places, and their relationships. Lindquist (1974) explained the concepts of store images further. He thought the Martineau's functional qualities included products, prices, store outlays, places, and other elements which stores used to compete. While psychological attributes included sense of belonging, feeling of warmth and friendliness, and feeling of excitement or interest. Engel, Blackwell, and Miniard (1995) defined store images as the overall perceptions of consumers.

2. Influential Factors to Store Images:

Martineau believed factors other than functional qualities could affect store images. These factors are: (1) building, (2) advertisement, (3) symbol and color, (4) personnel and service, (5) location, (6) price range, (7) quality, and (8) assortment. Kunkel and Berry (1968) used 12 categorized store image factors in open-ended questionnaires to survey 1,050 women and found 99% answers of store images fall into these 12 categories.

Lindquist sorted the store images into nine categories and 33 characteristics, including positive and negative attributes to image formation. Engel, Blackwell, and Miniard postulated important store image characteristics as the following: (1) location, (2) nature and quality of assortments, (3) price, (4) advertising and promotion, (5) sales personnel, (6) services offered, (7) physical store attributes, (8) nature of store clientele, (9) store atmosphere, and (10) post-transaction service and satisfaction.

3. Effects of Store Images to Consumers' Behavior

Nelson (1962) believed the images and attitudes formed by consumers before consumption are shaped by different feelings. Therefore, factors affecting consumer perceptions of store images could influence their behavior. Walters (1974) mentioned that good store images strengthened the customers' satisfaction, while bad store images made customers feel displeasing about the stores. Stanley and Sewall (1967) and Nevin and Houston (1980) used store images in practical research and found significant relationships between store images and consumers' behavior.

4. Evaluating Store Images

Golden, Albaum, and Zimmer (1987) suggested that proper methods of evaluating store images are multi-attribute approaches. Engel, Blackwell, and Miniard mentioned that understanding consumers' perceptions of image attributes could help stores to realize key elements of success and advantages in competition.

5. Meaning of Perceptions and Expectations

Parasuraman, Zeithaml, and Berry (1985) defined perceptions as consumers' beliefs of provided services. Schiffman and Kanuk (1994) interpreted perceptions as the processes of selecting, organizing, and explaining outside stimuli. Carman (1990) stated expectations as standards based on experiences. Parasuraman, Zeithaml, and Berry (1985) explained expectations as services which should be provided, not those have been already provided. Differences between perceptions and expectations can be measured by quality of service as proposed by Parasuraman, Zeithaml, and Berry (1985).

6. Customer Satisfaction

Oliver (1981) believed customer satisfaction came from consumers' overall evaluations of obtaining products and experiences of consuming. Kotler (1994) proposed that customer satisfaction should be stated as a function of performance and expectations to measure differences between perceptions of product performance and personal expectations. Engel, Blackwell, and Miniard interpreted customer satisfaction as comparisons of product performance and pre-purchasing beliefs. When product performance and pre-purchasing beliefs are

consistent, consumers can be satisfied.

Parasuraman, Zeithaml, and Berry (1988) further utilized perception differences of consumers to explain behavior and suggested six considerations: (1) royalty, (2) purchased over-charged products, (3) internal complaint, (4) external complaint, (5) words of mouth communications, and (6) store switching.

METHODOLOGY

The Council of Agriculture had licensed and supported 16 integrated fresh pork retailing centers in Taiwan. Eight of them have retailing functions. This research is to analyze consumer expectations and perceptions of these eight retailing centers. Categorized store images proposed by Kunkel and Berry, concepts of customers' satisfaction and its influences to behavior stated by Parasuraman, Zeithaml, and Berry are utilized in this research. The frame of this research is shown in the figure 1. Three major parts are included in this research: (1) factors affecting store images, (2) differences between perceptions and expectations, and (3) variables affecting consumers' behavior.

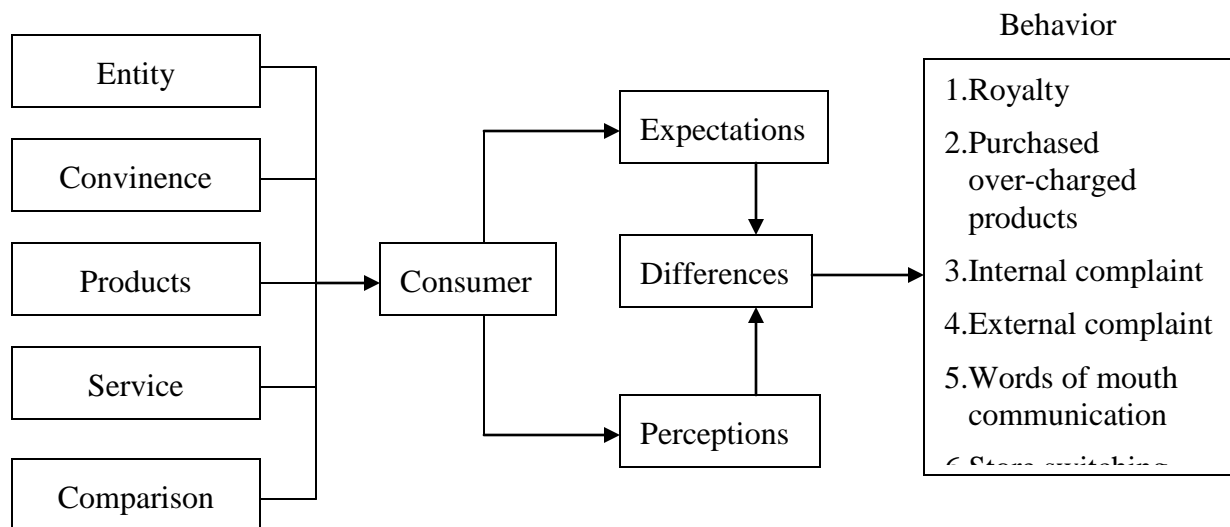


Figure 1. Theoretical Framework of This Research

In order to obtain information needed for this research, questionnaires were designed to survey customers of integrated fresh pork retailing centers. Questions of image characteristics in questionnaires are listed in table 1.

Table 1 Question numbers and contents of image formation

Dimension	Question number	Image Characteristics
Entity	2	Sanitary conditions of the retailing centers
	4	Adequate business hours
	5	Adequate interior and exterior design
	9	Display of meat products
	12	Store atmosphere
	18	Brightness and space of the store
	20	Adequate interior layout
Convenience	8	Time needed to reach the retailing centers
	14	Accessibility of parking
	23	Nearness to traditional markets or supermarkets
Product Attributes	1	Freshness of meat products
	3	Reliability of meat products
	6	Diversity of meat products
	7	Packaging of meat products
	10	Reasonable pricing
	13	Availability of meat products
	15	Residuals in meat products
Sales Personnel	17	With "Chinese Agricultural Standard" certificates
	11	Attitudes of sales personnel
	21	Neat appearance of sales personnel
Comparison with Other Stores	16	Well trained sales personnel with related knowledge
	19	Better quality with same prices
	22	More attractive

Analytical methods utilized in this study include descriptive analyses, multivariate analysis of variance, hypothesis testing, univariate analysis of variance, Scheff posterior testing, correlation analysis, and path analysis.

RESULTS

1. Importance of Store Image Characteristics

Store images classified by customers as "very important" are following: (1) freshness of meat products, (2) sanitary conditions of the retailing centers, (3) reliability of meat products, (4) diversity of meat products, (5) time needed to reach the retailing centers, (6) reasonable pricing, (7) accessibility of parking, (8) residuals in meat products, (9) CAS (Chinese Agricultural Standard) certificates, and (10) nearness to traditional markets or supermarkets.

Store images classified as "important" are following: (1)adequate business hours, (2) attitudes of sales personnel, (3) store atmosphere, (4) availability of meat products, (5) well trained sales personnel with related knowledge, and (6) better quality with same prices.

Store images classified as "ordinary" are following: (1) adequate interior and exterior design, (2) packaging of meat products, (3) display of meat products, (4) brightness and space of the store, (5) neat appearance of sales personnel, and (6) more attractive.

2. Satisfaction of Store Image Characteristics

Store image characteristics classified as "very satisfied" are following: (1) fresh meat products, (2) good sanitary conditions of the retailing centers, (3) reliable meat products, (4) proper packaging of meat products, (5) good atmosphere of the retailing centers, (6) no or limited amount of residuals in meat products, (7) good attitudes of sales personnel, and (8) adequate interior layout.

Store image characteristics classified as "satisfied" are following: (1) adequate interior and exterior design, (2) diversity of meat products, (3) display of meat products, (4) reasonable pricing, (5) nearness to traditional markets or supermarkets, (6) availability of meat products, (7) well trained sales personnel with related knowledge, (8) brightness and space of the store.

Store image characteristics classified as "ordinarily satisfied" are following: (1) adequate business hours, (2) time needed to reach the retailing centers, (3) accessibility of parking, (4) better quality with same prices, (5) neat appearance of sales personnel, and (6) more attractive

Only one store image characteristic is classified as "not satisfied", which is "Chinese

Agricultural Standard" certificates.

3. Differences in Consumers' Perceptions

Positive differences in perceptions indicate that consumers value image characteristics more than feeling of satisfaction. Negative differences in perceptions mean that consumers value degrees of satisfaction more than image characteristics.

Positive and significant differences in perceptions of store images are: (1) freshness of meat products, (2) reliability of meat products, (3) diversity of meat products, (4) reasonable pricing, (5) availability of meat products, (6) accessibility of parking, (7) residuals in meat products, (8) well trained sales personnel with related knowledge, (9) "Chinese Agricultural Standard" certificates, (10) better quality with same prices, and (11) nearness to traditional markets or supermarkets. Negative and significant differences in perceptions of store images are: (1) packaging of meat products, (2) adequate interior and exterior design, (3) store atmosphere, and (4) adequate interior layout.

4. Demographic Variables

Consumers with higher educational levels pay more attention to "freshness of meat products", "reliability of meat products", "adequate business hours", and "more attractive" characteristics. Gender, employment, age, family size, and family income did not show significant differences in these characteristics. Lower income families tend to concern more about the "reasonable pricing" characteristic. Store atmosphere and interior layout only affect female shoppers. Consumers at age 41 to 50 consider "availability of meat products", and "nearness to traditional markets or supermarkets" characteristics more than consumers in other age groups. Consumers at age below 30 pay more attention to "Chinese Agricultural Standard" certificates than consumers in other age groups.

5. Correlation Analysis and Path Analysis Results

Consumers with higher expectations tend to pay more attention to performance of the integrated fresh pork retailing centers. The levels of expectations significantly affect differences in perceptions of consumers. Perceptions positively affect satisfactory levels, but negatively affect differences in perceptions of consumers. Larger differences in perceptions tend to have lower satisfactory levels.

Higher satisfactory levels show positive reactions to behavior like "recommend friends to shop in the integrated fresh pork retailing centers", "frequently shopping", "purchasing with higher prices", etc. However, consumers are conservative about praising the retailing centers. Negative behavior from unsatisfied experiences are "cutting down purchasing amount", "store switching", "complaint to other customers", and "complaint to sales personnel". Unsatisfied customers are rarely raising their voices to the agricultural administration.

SUGGESTIONS

Based on the ordering of differences in perceptions and satisfaction of store images (table 2), suggestions for managing the retailing centers are: (1) image characteristics with positive differences should have higher priorities than characteristics with negative differences, (2) image characteristics with the same positive differences, higher consumer expectations should have higher priorities.

1. Location

Problems associated with the integrated fresh pork retailing centers that consumers concerned about are: (1) time needed to reach the retailing centers, (2) accessibility of parking, and (3) nearness to traditional markets or supermarkets. These problems indicate that business locations chosen by the integrated fresh pork retailing centers do not actually fit into the needs of consumers. Future retailing centers should choose locations more carefully and consider the demand of nearby customers. Those retailing centers are already in business may consider relocate if difficulties of moving could be overcome.

2. Sanitary Considerations

Consumers have strong desire and needs to consume safe meat products. The sanitary conditions are the key factors for the integrated fresh pork retailing centers to survive. Establishing systems of meat quality could eliminate worries of consumers about the meat safety.

Table 2 Ordering of Differences in Perceptions of Store Images

	Description	Mean of Image Importance	Mean of Image Satisfaction	Difference
1	With "Chinese Agricultural Standard" certificates	4.22	3.23	0.99*
2	Time needed to reach the retailing centers	4.09	3.36	0.73*
3	Residuals in meat products	4.72	4.04	0.68*
4	Reasonable pricing	4.29	3.64	0.65*
5	Accessibility of parking	4.18	3.53	0.65*
6	Better quality with same prices	4.00	3.41	0.59*
7	Nearness to traditional markets or supermarkets	4.15	3.72	0.44*
8	Reliability of meat products	4.49	4.12	0.37*
9	Well trained salesperson with meat related knowledge	4.15	3.78	0.37*
10	Freshness of meat products	4.73	4.37	0.36*
11	Diversity of meat products	4.18	3.90	0.28*
12	Availability of meat products	4.14	3.95	0.19
13	Adequate business hours	3.94	3.83	0.10
14	More attractive	3.64	3.58	0.06
15	Attitudes of sales personnel	4.17	4.12	0.05
16	Sanitary conditions of the retailing centers	4.53	4.49	0.04
17	Display of meat products	3.64	3.85	-0.21
18	Brightness and space of the store	3.71	3.86	-0.15
19	Neat appearance of sales personnel	3.56	3.65	-0.09
20	Packaging of meat products	3.46	4.42	-0.96*
21	Adequate interior and exterior design	3.82	4.47	-0.65*
22	Store atmosphere	4.05	4.59	-0.54*
23	Adequate interior layout	3.91	4.14	-0.23*

* significant at the 5% level

3. Marketing-oriented Management

The majority customers of the integrated fresh pork retailing centers in Taiwan are female (67.9%), household wives or working on farms (44.9%), age 41 to 50 (41%), household size of 4 (33.3%), annual household income between US\$16,000 and US\$23,000 (75.6%),

shopping twice a week (42.3%), shopping 1.2 to 1.8 kilograms of pork (42.3%), and spending US\$3 to US\$6 each time (42.3%). Therefore, the integrated fresh pork retailing centers may utilized the above information to segment markets when designing marketing strategies.

For characteristics with positive differences in perceptions, the integrated fresh pork retailing centers should strengthen these characteristics of store images. For characteristics which are not easily separable with others, the integrated fresh pork retailing centers need at least to maintain the current performance.

REFERENCES

1. Arons, L., "Does Television Viewing Influence Store Image and Shopping Frequency?" *Journal of Retailing*, 37(Fall 1961):1-13.
2. Boulding, K. E., *The Image*, University of Michigan Press, 1956.
3. Carman, J. M., "Consumer Perception of Service Quality: An Assessment of the SERVQUAL Dimensions", *Journal of Retailing*, 66(Spring 1978):44-56.
4. Engel, J. E., R. D. Blackwell, and P. W. Miniard, *Consumer Behavior*, 8th Ed., The Dryden Press, 1995.
5. Fornell, C., and W. Birger, "Defensive Marketing Strategy by Customer Complaint Management: A Theoretical Analysis", *Journal of Marketing Research*, 24(Nov. 1987):345.
6. Kotler, P., *Marketing Management*, 8th Ed., Prentice Hall.
7. Kunkel, J. H., and L. L. Berry, "A Behavior Conception of Retailing Image", *Journal of Marketing*, 32(Oct. 1968):21-27.
8. Lindquest, J. D., "Meaning of Image", *Journal of Retailing*, 50(Winter 1974):29-38.
9. Martineau, P., "The Personality of the Retailing Store", *Harvard Business View*, (Jan.-Feb. 1958):29-38.
10. Nelson, B. H., "Seven Principles in Image Formation", *Journal of Marketing*, (Jan. 1962):67-71.
11. Nevin, J. R., and M. J. Houston, "Image As a Component of Attraction to Shopping Area", *Journal of Retailing*, 56(1)(1980):84-87.
12. Oliver, R. L., "Measurement and Evaluation of Satisfaction Process in Retailing Setting", *Journal of Retailing*, (Fall 1981):25-48.
13. Parasurama, A., V. A. Zeithamal, and L. L. Berry, "A Conceptual Model of Service Quality and It's Implication for Future Research", *Journal of Marketing*, (Fall 1985):41-45.
14. Parasurama, A., V. A. Zeithamal, and L. L. Berry, "Communication and Control Processes in

- the Delivery of Service Quality", *Journal of Marketing*, (April 1988):35-48.
15. Parasurama, A., V. A. Zeithamal, and L. L. Berry, "The Behavior Consequences of Service Quality", *Journal of Marketing*, (April 1996):31-46.
 16. Schiffman, L. G., and L. L. Kanuk, *Consumer Behavior*, 4th Ed., Englewood Cliffs: Prentice Hall.
 17. Stanley, T. J., and M. A. Sewall, "Image Input to a Probabilitic Model: Predicing Retail Potential", *Journal of Retailing*, 40(July 1976):48-53.
 18. Walter, G. C., and W. P. Gorden, *Consumer Behavior: An Integrated Framework*, Richard D. Irwin, Inc., 1970.