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Isi Kandungan

A STUDY ON THE STRATEGIES OF SUCCESSFUL BUMIPUTRA FOOD SERVICE BUSINESS IN KEDAH, PERLIS AND PENANG: CONCEPT, FOOD, AMBIENCE AND BUSINESS PROCESSES

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ABSTRACT

Today, food service business operators are faced with dynamic wants of their customers. To survive, they need to ensure that their patrons are satisfied and remain loyal. Feedback is a crucial factor, and it is about time restaurant owners listen to their customers. A major step to move forward is to identify the key factors that would lead to customer satisfaction and loyalty. This research uses the structural equations modeling that link customer satisfaction to its causes and consequence. The causes of customer satisfaction (η_2) are perceived quality of "hardware" (ξ_1), perceived quality of "software" (ξ_2), and perceived value (η_1). Customer satisfaction is the intermediate variable for customer loyalty. The research conducted in the three northern states found that perceived product quality (hardware) had almost 80% total effect on customer satisfaction and about 69% total effect on customer loyalty. The variables of perceived product quality include customers' overall perceptions, food freshness, cleanliness, and taste. The "software" variables that affect customer perception and value are overall restaurant attractiveness, cleanliness, waiter responsiveness, table arrangements, order taking and delivery. Bumiputra restaurant operators should focus on the "hardware" aspects, as they are important determinants of customer satisfaction and key success factors of their businesses.

INTRODUCTION

This research was conducted to obtain customer feedback regarding services provided by selected popular Malay restaurants and eateries in Kedah, Perlis, and

Penang. The feedback obtained will enable the research team to identify important determinants of customer satisfaction and help establish base year indices of satisfaction that will be used for tracking business performance, customer satisfaction and loyalty in this industry.

BACKGROUND OF THE STUDY

The current food service industry is competitive with customers ever willing to try new food and new places to satisfy their wants. It can be considered a buyers' market and operators have no choice but to reinvent themselves if they want to remain in the industry. The establishment of new restaurants ran by Indian Muslims in many towns and cities have brought greater challenges to the Bumiputra food service operators which seem to be losing out to the new players. It is against this backdrop that the research was initiated to explain why "Nasi Kandar" restaurants, for example, are able to attract customers and why some Bumiputra restaurants are in a state of lethargy and bound for closure.

RESEARCH OBJECTIVE

The objectives of this research are:

1. To determine the customer satisfaction level towards selected Bumiputra food service businesses
2. To identify the key variables contributing significant total effect on customer satisfaction and loyalty.
3. To establish a base year indices for major variables such as perceived quality, value, customer satisfaction and loyalty.

RESEARCH DESIGN

Regression Coefficients

The initial step towards achieving the objectives is to compute the variance between measured and latent dependent variables that are accounted by independent variables. All variables are listed in Figure 1 and are classified as observed, unobserved, endogenous and exogenous. The focus is on path coefficients between variables and the direct and indirect effects these variables have on customer satisfaction and loyalty.

Observed Variables

The research is a single cross-sectional customer satisfaction study conducted on selected Malay restaurants in the northern region. The information collected is basically the customers' responses on important variables related to the food being served such as taste, consistency, variety, freshness, cleanliness, uniqueness, the service provided by the workers in terms of promptness, accuracy in taking and delivering orders, and the decorations, table arrangements and ambience. Other variables studied are price, value for money, overall cleanliness, attractiveness, visibility, perception, satisfaction, and willingness to recommend and return for service. These variables are categorized into the observed and endogenous variables as represented in the research questionnaire by Q3E, Q2, Q9, Q13, Q12, Q11, Q15, Q8B, Q8A, Q1, Q10, Q3C, Q3D, Q3B, Q3A, Q4, Q5A, Q5B, Q5C, Q5D, Q7A, Q7B, Q6B, Q6A, and Q16.

Unobserved Variables

The unobserved, latent, and endogenous variables are customer satisfaction, value, and customer loyalty. Other unobserved exogenous variables are measurement error terms and residuals labeled in the research model as e3e, e2, e9, e13, e12, e11, e15, e8b, e8a, e1, e10. The Perceived Product Quality (Hardware) are labeled as e3b, e3a, e3d, e3c, e4, and the Perceived Product Quality (Software) as e5c, e5d, e7a, e6b, e6a, e16, e5b, e5a, e7b, res3, res2, and res1.

Parameters
The distinct parameters to be estimated by the research are the regression weights, variances of exogenous variables, covariance among exogenous variables, squared multiple correlations, correlations among exogenous variables, and standardized regression weights.

Questionnaires
The questionnaire for data collection is industry specific and based on the cause-and-effect format of the theoretical framework. Questions 11, 12, and 13 were used for measuring customer satisfaction and questions 15 and 16 for customer loyalty. Question 1 is related to overall customer expectation and was placed at the beginning of the questionnaire to minimize bias.

Respondents
Respondents were randomly selected among customers of the respective restaurants studied. Data was collected by enumerators who interviewed 50 respondents over a 3-hour period between 11.00 am to 2.00 pm. The primary data is useful for the purpose of establishing base year indices for the restaurants, predicting future indices, estimating model parameters, and strategic planning.

Fieldwork
Data collection was conducted in January 2003 and completed by 16 April 2003. The sample size was based on the number of distinct parameters to be estimated (82) multiplied by 10 cases, which equals 820. Actual sampling distribution among states totaled 500 for Kedah, 450 for Penang, and 400 for Perlis. However, the total sampled respondents were 1,350.

DATA ANALYSIS
Data Transformation
Raw scores were collected using the interval scale of "1-10". Collected data were then transformed into an index scale of "0-100" based on the formula:

$$X = \frac{V - 1}{9} \times 100\%$$, where V = average raw score for every observed variable.

The availability of these indices and regression weights helped the research in estimating variance, index of observed variables, do intra-industry comparisons, track performance, and perform strategic benchmarking.

The customer satisfaction index (CSI) was calculated on the basis of the formula:

$$\{[(Q_{11})(W_{11}) + (Q_{12})(W_{12}) + (Q_{13})(W_{13})]\} \times 11.111$$

where,

Q_{11} =	Average raw score on question # 11
W_{11} =	Weight for question # 11
Q_{12} =	Average raw score on question # 12
W_{12} =	Weight for question # 12
Q_{13} =	Average raw score on question # 13
W_{13} =	Weight for question # 13

Index for customer loyalty was derived from questions 15 and 16 and based on similar calculation as the CSI. The ranking of indices were based on four quartiles as shown in Table 1. The higher the index score, the better is the performance.

financial performance will be recorded for the respective Bumiputra restaurants in the future.

SUGGESTIONS FOR FUTURE RESEARCH

There is a need for future research to focus on the relationship between critical success factors of the independent variables—perceived product quality, image, perceived value, customer satisfaction, and the dependent variable, revenue earned during the period. The research design for this would be longitudinal and require full and honest cooperation from restaurant owners. This may not be a problem if they have the right managerial perspectives and trust the research team.
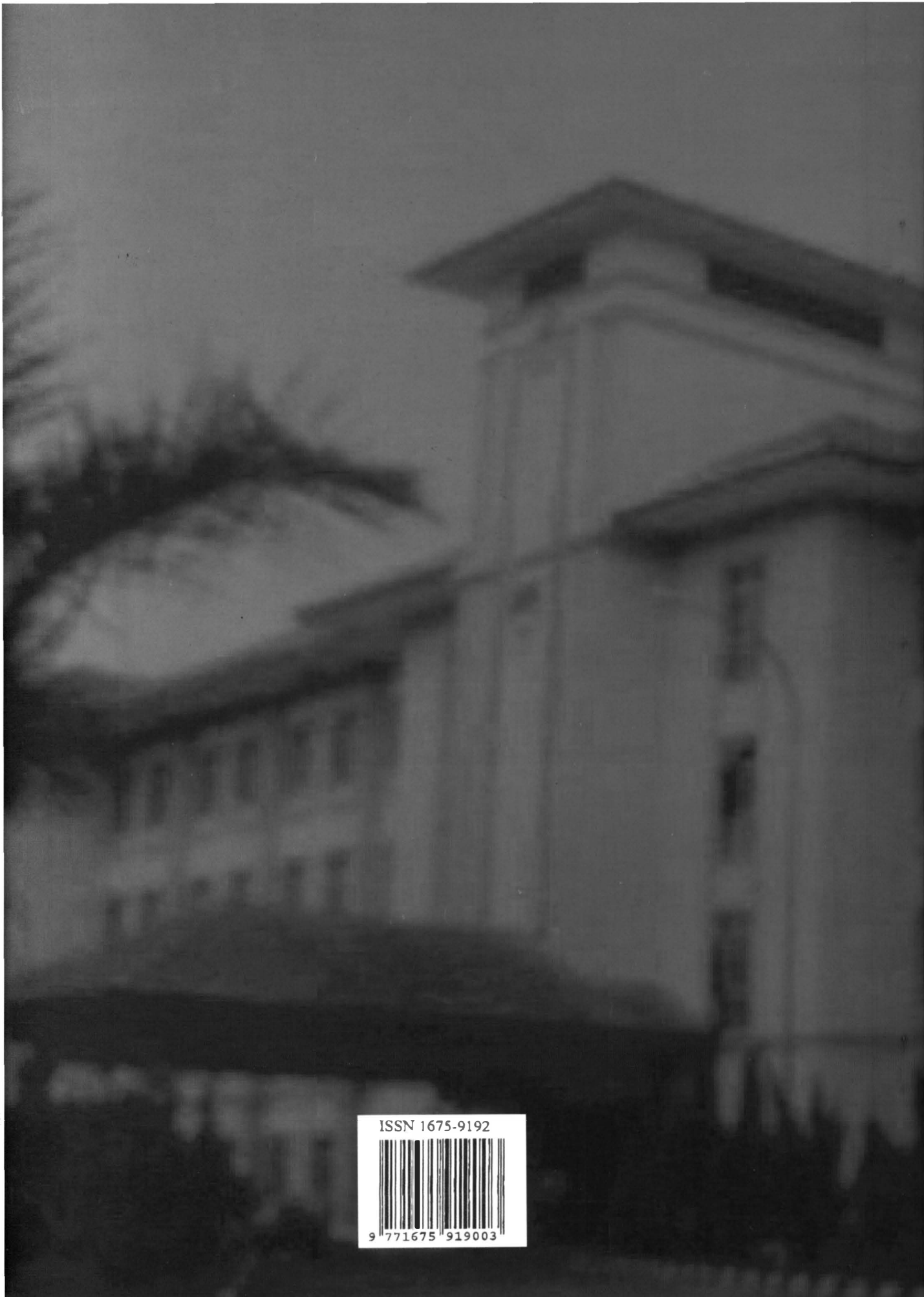
Alternatively, the operators themselves could provide the research team periodic data based on pre-formatted questions so that analysis and feedback could be given regarding business performance.

The effects of customer satisfaction and loyalty on revenue have yet to be tested. If customers are satisfied and loyal, will restaurants foresee a rise in their revenue? Does loyalty correlate with revenue and profitability? Is satisfaction really a proxy of profitability or is it loyalty that leads to profitability? It is hoped that future researches will be able to find the answers to these questions.

BIBLIOGRAPHY

Anderson, E. W. (2000). Foundations of the American Customer Satisfaction Index. *Total Quality Management*. Vol. 11, No. 7: 869-882.

Bollen, K.A., & Long, J.S. [Eds.] (1993). *Testing Structural Equation Models*. Newbury Park, CA: Sage.

Brecka, J. (1994). The American Customer Satisfaction Index. *Quality Progress*. Vol. 27, No. 10: 41-44.

Browne, M.W. & Cudeck, R. (1993). Alternative Ways of Assessing Model Fit. In Bollen, K.A. & Long, J.S. [Eds.] *Testing Structural Equation Models*. Newbury Park, CA: Sage.

ECSI Technical Committee (1998, October). European Customer Satisfaction Index: Foundation and Structure for Harmonized National Pilot Projects. Reports prepared for the ECSI Steering Committee.

Ellis, L. and Curtis, C. (1995). Measuring Customer Satisfaction. *Research Technology Management*. Vol. 38, No. 5: 45-50.

Fornell C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*. Vol. 56, No.1: 6-21.

Fornell C., Johnson M. D., Anderson E. W., Cha J., & Bryant B. E. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. *Journal of Marketing*. Vol. 60, October: 7-18.

G.A.O., (1991). Management Practices: U.S. Companies Improve Performance Through Quality Efforts. Washington, D.C., General Accounting Office, GAO/NSIAD:-91-190.

Gadd, K. W. (1995). Business Self-Assessment: A Strategic Tool for Building Process Robustness and Achieving Integrated Management. *Business Process Re-engineering and Management Journal*. Vol. 1, No. 3: 66-85.

Grandzol, J. R., & Gershon, M. (1998). A Survey Instrument for Standardizing TQM Modeling Research. *International Journal of Quality Science.* Vol. 3, No. 1: 80-105.

Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling.* New York: Guilford Press.

Madu, C. N. (1998). An Empirical Assessment of Quality: Research Considerations. *International Journal of Quality Science.* Vol. 3, No. 4: 348-355.

Malcolm Baldrige National Quality Award Guidelines. (1993). U.S. Department of Commerce and Technology, NIST, Washington, D.C.

Sarapath, J., Benson, P., & Schroeder R. (1989). An Instrument for Measuring the Critical Factors of Quality Management. *Decision Sciences.* Vol. 20: 810-829.

Steiger, J.H. & Lind, J.C. (1980). Statistically-Based Tests for the Number of Common Factors. Paper presented at the Annual Spring Meeting of the Psychometric Society, Iowa City.

Tamimi, N. (1998). A Second-Order Factor Analysis of Critical TQM Factors. *International Journal of Quality Science.* Vol. 3, No. 1: 71-79.

Voss, C. A., Chiesa, V., & Coughlan, P. (1994). Developing and Testing Benchmarking and Self-assessment Frameworks in Manufacturing. *International Journal of Operations and Production Management.* Vol. 14, No. 3: 83-100.