

The Applying Fuzzy Refined Kano ' s Model and Importance-Performance Analysis to Explore the Critical Service Quality ...

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ABSTRACT

In view of today ' s booming serving industry, how to improve service quality has become an important issue. Good service quality may lead to positive behavioral intentions of consumers. Service quality is also believed to be the key factor that successfully attracts consumers to make repurchases, and assisting enterprises in establishing a competitive advantage that distinguishes enterprises from other competitors in the service-oriented society. Hence, as far as enterprise managers are concerned, how to improve and enhance service quality has become an important issue of focus. In this study, the DINESERV scale was adopted, and a questionnaire survey targeting the consumers of the chain restaurant industry was conducted. The fuzzy refined Kano model and the degree of importance-performance analysis were adopted as the analysis methods in order to explore the critical service quality attributes of the chain restaurant industry. As the IPA analysis and Kano model analysis are independently defined and have their own set of management strategies, if only the recommendations are taken into account, there will be some drawbacks. Therefore, The fuzzy refined Kano model and IPA analysis combined were adopted in this study. The results show that the chain restaurant industry should first eliminate " care-free quality attributes " ; as for the service quality that falls under " keep up the good work " , " high attractive quality attributes " should be the focus for strengthened improvement, thereby enhancing the competitive advantage and striving to continue to provide " high value-added quality attributes " and " ' critical quality attributes " in order to maintain consumer satisfaction. Subsequently, " potential quality attributes " was supplemented as a strategic weapon that highlights the competitive advantage; as for the service quality that falls under " concentrate here " , " critical quality attributes " and " high value-added quality attributes " are deemed as the areas requiring improvement. As " high attractive quality attributes " and " potential quality attributes " have no direct impact on consumer satisfaction, they are deemed as second priority items for improvement.

Keywords : Service Quality、Kano ' s Model、Refined Kano ' s Model、Importance-Performance Analysis

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REFERENCES

- 中文部分 1. 中華民國連鎖店協會。(1991)。2. 王一芝。(2012)。結合科技管理與東方料理。遠見雜誌，20120315。3. 杜珮君。(2010)。服務品質特性分類方法於海運承攬運送業之比較。國立台灣科技大學工業管理學系未出版之碩士論文。4. 林軒軒。(2011)。消費者對於網站服務品質認知之不對稱效果研究-以王品餐廳網站及星期五餐廳網站為例。致理技術學院企業管理系暨服務業經營管理研究所未出版之碩士論文。5. 林旻君。(2010)。以企業策略與品質要素之觀點探討虛擬社群服務品質之改善 - 以Facebook為例。國立政治大學資訊管理研究所未出版之碩士論文。6. 林美惠、劉尚賢、張竣賢。(2007)。大學生顧客對與複合式餐廳服務品質滿意度調查研究-以明道大學學生為例。明道學術論壇，3(1)，9-32。7. 胡凱傑、李太雨、丘志文。(2009)。以Kano模式與重要度績效分析探討亞洲主要貨櫃港口之服務品質。運輸學刊，23(1)，129-164。8. 孫路弘。(1996)。餐飲服務品質管理。觀光研究學報，2(1)，79-91。9. 陳為任、林宜勤。(2008)

- 。餐廳關係品質對顧客忠誠意願影響之研究。明新學報, 34(1), 307-321。 10. 楊政衡。(2011)。國際機場服務品質評估之研究-以桃園國際機場為例。國立成功大學交通管理學系碩博士班未出版之碩士論文。 11. 楊錦洲。(2008)。服務提供之策略考量。品質月刊, 44(7), 21-28。 12. 劉宗其、李奇勳、黃吉村、渥頓。(2001)。服務失誤類型、補償措施與再惠顧率之探討性研究-以CIT法應用於餐飲業為例。管理評論, 20, 65-97。 13. 蔡忠城。(2010)。應用Kano模式與IPA探討量販店服務品質要素之研究。逢甲大學工業工程與系統管理學研究所未出版之碩士論文。 14. 鄧維兆、李友錚。(2007)。北投溫泉旅館關鍵服務品質屬性確認 - Kano模式與IPA之應用。品質學報, 14(1), 99-113。 15. 鄭錫新、林錦珍。(2011)。以Kano模式探討量販店服務品質屬性。顧客滿意學刊, 7(2), 223-257。 16. 盧右梅。(2009)。應用IPA與Kano二維品質模式檢視台灣高鐵乘客之服務品質需求。國立彰化師範大學企業管理學系未出版之碩士論文。 17. 盧淑華。(2002)。微信室產業調查科產業動態。華銀月刊, 615。 18. 賴建宇。(2010)。民間投資-服務業邁向高峰。天下雜誌, 453, 211-214。 19. 韓俊傑。(2010)。內部顧客對於資訊服務品質滿意之研究-以G公司為例。世新大學資訊管理學研究所未出版之碩士論文。 20. 行政院主計處。(2011)。中華民國行業標準分類第9次修訂, 來源:
<http://www.dgbas.gov.tw/ct.asp?xItem=28854&ctNode=5479&mp=1> 21. 行政院主計處。(2012)。歷年各季國內生產毛額依行業別, 來源:
<http://www.dgbas.gov.tw/public/Attachment/210318322971.xls> 22. 行政院主計處。(2012)。就業、失業速報統計表, 來源:
<http://www.dgbas.gov.tw/public/Attachment/210228373271.xls> 英文部分 1. Aigbedo, H., & Parameswaran, R. (2004). Importance-performance analysis for improving quality of campus food service. *The International Journal of Quality and Reliability Management*, 21(8), 876-896. 2. Akan, P. (1995). Dimension of service quality: A study in Istanbul. *Managing Service Quality*. MCB University Press, 5(6), 39-43. 3. Aydemir, S. D., & Gerni, C. (2011). Measuring Service Quality of Export Credit Agency in Turkey by Using SERVQUAL. *Procedia Social and Behavior Sciences*, 24, 1663-1670. 4. Babakus, E., & Boller, G. W. (1992). An Empirical Assessment of SERVQUAL Scale. *Journal of Business Research*, 24, 253-268. 5. Babakus, E., Bienstock, C., & Scotter, J. (2004). Linking perceived quality and customer satisfaction to store traffic and revenue growth. *Decision Sciences*, 35(4), 713-737. 6. Badri, M. A., Abdulla, M., & Al-Madani, A. (2005). Service quality assessment and application of SERVQUAL. *International Journal of Quality & Reliability Management*, 22(8), 819-848. 7. Bateson, J. E., & Hoffman, K. G. (2002). *Essential of Service Marketing: Concepts, Strategies and Cases*. Harcourt, Inc. 8. Berger, C., & Blauth, R., Boger, D., Burchill, G., DuMouchel, W., Pouliot, F., Richter, R., Rubinoff, A., Shen, D., Timko, M., & Walden, D. (1993). Kano's Methods for Understanding Customer-Defined Quality. *The Center for Quality Management Journal*, 2(4), 3-36. 9. Berman, B., & Evans, J. R. (1998). *Retail Management: A Strategic Approach* (7th ed). New Jersey: Prentice-Hall. 10. Bitner, M. J. (1990). Evaluating Service Encounters: The effects of physical surrounding and employee responses. *Journal of Marketing*, 54(2), 69-82. 11. Bojanic, D. C., & Rosen, L. D. (1994). Measuring service quality in restaurants: An application of the SERVQUAL instrument. *Hospitality Research Journal*, 18(1), 3-14. 12. Bougoure, U., & Neu, M. K. (2010). Service quality in the Malaysian fast food industry: an examination using DINESERV. *Service Marketing Quarterly*, 31(2), 194-212. 13. Brown, T. J., & Churchill, G. A., Jr. & Peter, J. P. (1993). Research note: improving the measurement of service quality. *Journal of Retailing*, 69, 127-139. 14. Carman, J. M., & Kenneth, P. (1973). *Marketing: Principles and Methods* (7th ed.). Chicago: Richard D. Irwin Inc. 15. Chen, T. C. (2001). Applying linguistic decision-making method to deal with service quality evaluation problems. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 9, 103-114. 16. Chen, S. J., & Hwang, C. L. (1992). *Fuzzy Multiple Attribute Decision Making: Methods and Applications*. New York: Springer-Verlag. 17. Chen, T. L., & Lee, Y. H. (2006). Kano Two-Dimension Quality Model and Importance-Performance Analysis in the Student's Dormitory Service Quality Evaluation in Taiwan. *The Journal of American Academy of Business*, 9(2), 324-330. 18. Cheng, B. W., & Chiu, W. H. (2007). Two-dimensional quality function deployment: An application for deciding quality strategy using fuzzy logic. *Total Quality Management and Business Excellence*, 18(3-4), 451-470. 19. Churchill, G. A., Jr. & Surprenant, C. (1982). An investigation into the Determinants of Customer Satisfaction. *Journal of Marketing Research*, 19, 491-504. 20. Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56, 55-68. 21. Crosby, P. B. (1979). *Quality is free*. New York: McGraw-Hill Co. 22. Curry, A., & Sinclair, E. (2002). Assessing the quality of physiotherapy services using SERVQUAL. *International Journal of Health Care Quality Assurance*, 15(5), 197-205. 23. Deng, W. J. (2007). Using a revised importance-performance analysis approach: The case of Taiwanese hot springs tourism. *Tourism Management*, 28(5), 1274-1284. 24. Denguir-Rekik, A., Montmain, J., & Mauris, G. (2009). A possibilistic-valued multi-criteria decision-making support for marketing activities in e-commerce: Feedback Based Diagnosis System. *European Journal of Operational Research*, 195(3), 876-888. 25. Deshpande, R., Farley, J., & Webster, F. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrante analysis. *Journal of Marketing*, 57(1), 23-27. 26. Deveraj, S., Fan, M., & Kohli, R. (2002). Antecedents of B2C channel satisfaction and preference: validating e-commerce metrics. *Information Systems Research*, 13, 316-333. 27. Devlin, S. J., & Dong, H. K. (1994). Service quality from customers' perspective. *Marketing Research*, 6(1), 5-13. 28. Douglas, L., & Connor, R. (2003). Attitudes to service quality-The expectation gap. *Nutrition & Food Science*, 33(4), 165-172. 29. Douglas, G. P. (2001). An integrative framework for urban tourism research. *Annals of Tourism Research*, 28(4), 926-946. 30. EL-Ansary, A. I., & Stern, L. W. (1988). *Marketing Channels* (3rd ed.). New Jersey: Prentice-Hall. 31. Ennewm, C. T., Reed, G. V., & Binks, M. R. (1993). Importance-performance analysis and the measurement of service quality. *European Journal of Marketing*, 27(2), 59-70. 32. Eshghi, A., Roy, S. K., & Ganguli, S. (2008). Service quality and customer satisfaction: An empirical investigation in Indian mobile telecommunications services. *Marketing Management Journal*, 18(2), 119-144. 33. Eskildsen, J. K., & Kristensen, K. (2006). Enhancing importance-performance analysis. *International Journal of Productivity and Performance Management*, 55(1), 40-60. 34. Etzel, M. J., Bruce, J. W., & William, J. S. (2001). *Marketing Management* (12th ed.). Irwin: McGraw-Hill. 35. Fisk, R. P., Brown, S. W., & Bitner, M. J. (1993). Tracking the evolution of the services marketing literature. *Journal of Retailing*, 69, 61-103. 36. Garcia-Murillo, M., & Annabi, H. (2002). Customer knowledge

management. *Journal of the Operational Research Society*, 53(8), 875-884. 37. Garvin, D. A. (1983). Quality in the Line. *Harvard Business Review*, 61(5), 65-73. 38. Gitlow, H. S. (1998). Innovation on demand. *Quality Engineering*, 11(1), 79-89. 39. Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44. 40. Hawes, J. M., & Rao, C. P. (1985). Using importance-performance analysis to develop health care marketing strategies. *Journal of Health Care Marketing*, 5(4), 19-25. 41. Haemoom, O. (2001). Revisiting importance-performance analysis. *Tourism Management*, 22(6), 617-627. 42. Hemmasi, M., Strong, K. C., & Taylor, S. A. (1994). Measuring service quality for strategic planning and analysis in service firms. *Journal of Applied Business Research*, 10(4), 24-34. 43. Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The Motivation to Work*. New York: John Wiley & Sons. 44. Herzberg, F., Mausner, B., & Snyderman, B. B. (1993). *The Motivation to Work*. New Brunswick, NJ: Transaction Publishers. 45. Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review*, 72(2), 164-174. 46. Heung, C. S., Wong, M. Y., & Hailin, Q. (2000). Airport-restaurant service quality in Hong Kong. *Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 86-96. 47. Hollenhorst, S., Olson, D., & Fortney, R. (1992). Use of importance-performance analysis to evaluate state park cabins: The case of the West Virginia State Park system. *Journal of Park and Recreation Administration*, 10(1), 1-11. 48. Hsu, T. H., Chu, K. M., & Chan, H. C. (2001). A study on fuzzy linguistic scale. *Journal of Business Administration*, 51, 27-52. 49. Hu, H. Y., Lee, Y. C., & Yen, T. M. (2009). Amend Importance-Performance Analysis method with Kano's model and DEMATEL. *Journal of Applied Sciences*, 9(10), 1833-1846. 50. Huang, L. F., & Wu, B. (1992). Analysis of fuzzy statistics and its applications in surveys. Department of statistics, National Cheng Chi University, Taiwan. 51. Huang, Y. C., Wu, C. H., & Hsu, C. J. (2006). Using importance-performance analysis in evaluating Taiwan medium and long distance national highway passenger transportation service quality. *The Journal of American Academy of Business*, 8(2), 98-104. 52. Iacobucci, D., & Swartz, T. A. (2000). *Handbook of Services Marketing and Management*. Thousand Oaks, Cali: Sage Publication. 53. International Franchise Association, IFA., (1959). 54. Jane A. C., & Dominguez, S. M. (2003). Citizens' role in health services: satisfaction behavior: Kano's model, part 2. *Quality Manage Health Care*, 12(1), 72-80. 55. Japan Franchise Association, JFA. (1972). 56. Juran, J. M., Frond, M. C., & Bingham, R. S. (1974). *Quality Control Handbook*. New York: McGraw Hill Book Company. 57. Juran, J. M. (1986). *A Universal Approach to Managing for Quality*. *Quality Progress*, 19, 10-24. 58. Justis, R. T., & Judd, R. (1989). *Franchising*. Ohio: South-Western Publishing Co. 59. Kano, N., Seraku, N., Takahashi, F., & Tsuji, S. (1984). Attractive quality and must-be quality. *The Journal of Japanese Society for Quality Control*, 14(2), 38-48. 60. Kano, N. (1996). *Guide to T.Q.M. in service industries* (3rd ed.). Tokyo: Asian Productivity Organization. 61. Keyt, J. C., Yavas, U., & Riecken, G. (1994). Importance-performance analysis: A case study in restaurant positioning. *International Journal of Retail & Distribution Management*, 22(5), 35-40. 62. Kim, H. J., McCahon, C., & Miller, J. (2003). Assessing service quality in Korean casual-dining restaurants using DINESERV. *Journal of Foodservice Business Research*, 6(1), 67-87. 63. Kim, H. S., Joung, H. W., Yuan, Y. H. E., Wu, C., & Chen, J. J. (2009). Examination of the reliability and validity of an instrument for measuring service quality of restaurants. *Journal of Foodservice*, 20(6), 280-286. 64. Kim, W. G., Ng, C. Y. N., & Kim, Y. S. (2009). Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth. *International Journal of Hospitality Management*, 28(1), 10-17. 65. Knutson, B., Stevens, P., Wullaert, C., Patton, M., & Yokoyama, F. (1990). LODGSERV: a service quality index for the lodging industry. *Hospitality Research Journal*, 14(2), 277-284. 66. Kotler, P. (1991). *Marketing Management: Analysis, Planning, Implementation, and Control* (7th ed.). Prentice Hall Inc. 67. Kotler, P., & Keller, K. (2012). *Marketing Management* (14th ed.). Prentice Hall Inc. 68. Kumar, M., Kee, F. T., & Manshor, A. T. (2009). Determining the relative importance of critical factors in delivering service quality of banks; an application of dominance analysis in SERVQUAL model. *Managing Service Quality*, 19(2), 211-228. 69. Kuo, Y. F. (2004). Integrating Kano's Model into Web-Community Service Quality. *Total Quality Management and Business Excellence*, 15(7), 925-939. 70. Kuo, Y. F., Chen, J. Y., & Deng, W. J. (2012). IPA-Kano model: A new tool for categorizing and diagnosing service quality attributes. *Total Quality Management and Business Excellence*, 23(7), 731-748. 71. Laarhoved, P. J. M., & Pedrycz, W. (1983). A Fuzzy Extension of Satty's Priority Theory. *Fuzzy Sets and Systems*, 11, 229-241. 72. Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences*, 1(2), 172-198. 73. Labher, M. G. (1963). The new concepts of retailing. *The Wall Street Journal*, 16(8), 19-36. 74. Lee, W. I., Chang, T. H., & Chao, P. J. (2007). The Relationship Between Quality of Healthcare Service and Customer Satisfaction: An Example of Hospitals in Taiwan. *Journal of the Chinese Institute of Industrial Engineers*, 24(1), 87-95. 75. Lee, Y. H., & Chen, T. L. (2006). A Kano Two-dimensional Quality Model in Taiwan's Hot Spring Hotels Service Quality Evaluations. *The Journal of American Academy of Business*, 8(2), 301-306. 76. Lee, Y. K., Park, K. H., Park, D. H., Lee, K. A., & Kwon, Y. J. (2005). The relative impact of service quality on service value, customer satisfaction, and customer loyalty in Korean family restaurant context. *International Journal of Hospitality & Tourism Administration*, 6(1), 27 - 51. 77. Lee, T. R., & Li, J. M. (2006). Key Factors in Forming an E-Marketplace: An Empirical Analysis. *Electronic Commerce Research and Applications*, 5, 105-116. 78. Lee, Y. C., & Huang, S. Y. (2009). A New Fuzzy Concept Approach for Kano's Model. *Expert Systems with Applications*, 36(3), 4479-4484. 79. Lee, Y. C., Yen, T. M., & Tsai, C. H. (2008). The study of an integrated rating system for supplier quality performance in the semiconductor industry. *Journal of Applied Sciences*, 8(3), 453-461. 80. Lehtinen, U., & Lehtinen, J. R. (1982). *Service Quality: A Study of Quality Dimensions*. Unpublished working paper, Helsinki, Finland OY: Service Management Institute. 81. Levenburg, N. M., & Magal, S. R. (2005). Applying importance-performance analysis to evaluate E-business strategies among small firms. *E-Service Journal*, 3(3), 29-48. 82. Levitt, T. (1972). Production-line approach to service. *Harvard Business Review*, 50(5), 41-52. 83. Lewis, R. C., & Booms, B. H. (1983). *The Marketing Aspects of Service Quality*, in *Emerging Perspectives on Services Marketing*. Chicago: American Marketing. 84. Lewis, R. C., & Chambers, R. E. (1989). *Marketing leadership in hospitality*. New York: Van Nostrand Reinhold. 85. Lewis, B. R.,

& Mitchell, V. (1990). Defining and Measuring the Quality of Customer Service. *Marketing Intelligence and Planning*, 8(1), 11-17. 86. Lovelock, C. H. (1996). *Service Marketing* (3rd ed.). New Jersey: Prentice-Hall Inc. 87. Lovelock, C. H., Wirtz, J., & Chew, P. (2009). *Essentials of Services Marketing*. Singapore: Prentice-Hall. 88. Lovelock, C. H., & Wright, L. (2002). *Principles of Service Marketing and Management*. New Jersey: Prentice-Hall Inc. 89. Manski, C. (1990). The use of international data to predict behavior: A best-case analysis. *Journal of the American Statistical Association*, 85(412), 934-940. 90. Markovi?, S., & Raspor, S. (2010). Investigating perceived service quality in Croatian restaurant industry using DINESERV model. *Journal Studia Universitatis Babeş-Bolyai Negotia*, 55(4), 5-13. 91. Marr, J. W. (1986). Letting the customer be the judge of equality. *Quality Progress*, 19(10), 46-49. 92. Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41(1), 77-79. 93. Mason, J. B., Mayer, M. L., & Ezell, H. F. (1991). *Retailing* (4th ed.). Boston: Irwin, Homewood. 94. Matzler, K., Bailom, F., Hinterhuber, H. H., Renzl, B., & Pichler, J. (2004a). The asymmetric relationship between attribute-level performance and overall customer satisfaction: A reconsideration of the importance-performance analysis. *Industrial Marketing Management*, 33, 271-277. 95. Matzler, K., Fuchs, M., & Schubert, A. K. (2004). Employee satisfaction: Does Kanô's model apply? *Total Quality Management and Business Excellence*, 15(9/10), 1179-1198. 96. Matzler, K., & Hinterhuber, H. H. (1998). How to make product development projects more successful by integrating Kanô's model of customer satisfaction into quality function deployment. *Technovation*, 18(1), 25-38. 97. Matzler, K., Rier, M., Hinterhuber, H. H., Renzl, B., & Stadler, C. (2005). Methods and concepts in management: Significance, satisfaction and suggestions for further research-perspectives from Germany, Austria and Switzerland. *Strategies Change*, 14(1), 1-13. 98. Matzler, K., Sauerwein, E., & Heischmidt, K. A. (2003). Importance-performance analysis revisited: The role of the factor structure of customer satisfaction. *The Service Industries Journal*, 23(2), 112-129. 99. Mitra, A. (1993). *Fundamentals of quality control and improvement*. New York: Macmillan. 100. Murgulets, L., Eklof, J., Dukeov, I., & Selivanova, I. (2001). Customer satisfaction and retention in transition economies. *Total Quality Management*, 12(7), 1037-1046. 101. Myers, J. (2001). *Measuring customer satisfaction: hot buttons and other measurement issues*. Chicago: American Marketing Association. 102. Negi, R. (2009). Determining customer satisfaction through perceived service quality: A study of Ethiopian mobile users. *International Journal of Mobile Marketing*, 4(1), 31-38. 103. Nguyen, H. T., & Wu, B. (2000). *Fuzzy mathematics and statistical application*. Taipei: Jun Jie Press. 104. Odekeren-Schroder, G., De Wulf, K., Kasper, H., Kleijnen, M., Hoekstra, J., & Commandeur, H. (2001). The impact of quality on store loyalty: a contingency approach. *Total Quality Management*, 12(3), 307-322. 105. Oliver, R. L. (1980). Cognitive Model of the Antecedents and Consequences of Satisfaction Decision. *Journal of Marketing Research*, 17, 460-469. 106. Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57, 25-48. 107. Oyewole, P. (1999). Multi-attribute dimensions of service quality in the fast food restaurant industry. *Journal of Restaurant & Foodservice Marketing*, 3(3/4), 65-91. 108. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, 49(4), 41-50. 109. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perception of service quality. *Journal of Retailing*, 64(1), 12-40. 110. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1993). Research Note: More on Improving Service Quality Measurement. *Journal of Retailing*, 69(1), 140-147. 111. Park, J. W., Robertson, R., & Wu, C. L. (2004). The effect of airline service quality on passengers' behavior intentions: a Korean case study. *Journal of Airline Transport Management*, 10(6), 435-439. 112. Petruzzellis, L., D'Uggento, M. A., & Romanazzi, S. (2006). Students' satisfaction and quality of service in Italian universities. *Managing Service Quality*, 16(4), 349-364. 113. Pezeshki, V., Mousavi, A., & Grant, S. (2009). Importance-performance analysis of service attributes and its impact on decision making in the mobile telecommunication industry. *Measuring Business Excellence*, 13(1), 82-92. 114. Philips, L., Chang, D. R., & Buzzell, R. (1983). Product Quality, Cost Position and Business performance: A Test of Some Key Hypothesis. *Journal of Marketing*, 47(1), 26-43. 115. Rapert, M. I., & Wren, B. M. (1998). Service quality as a competitive opportunity. *The Journal of Services Marketing*, 12(3), 223-235. 116. Regan, W. J. (1963). The service revolution. *Journal of Marketing*, 50(2), 61-73. 117. Reichheld, F. F., & Sasser, W. E. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68, 105-110. 118. Rust, R. T., Zahorik, A. J., & Keiningham, T. L. (1995). Return on Quality(ROQ): Making Service Quality Financially Accountable. *Journal of Marketing*, 59(2), 58-70. 119. Saleh, F., & Ryan, C. (1991). Analyzing service quality in hospitality industry using the SERVQUAL model. *The Service Industries Journal*, 11, 324-343. 120. Saraei, S., & Amini, A. M. (2012). A study of service quality in rural ICT renters of Iran by SERVQUAL. *Telecommunications Policy*, 36, 571-578. 121. Sasser, W. E., Olsen, R. P., & Wyckoff, D. D. (1978). *Management of Service Operation: Text, cases and readings*. Boston: Allyn and Bacon. 122. Schewe, C. D., & Smith, R. M. (1983). *Marketing Concepts and Application*. New York: McGraw-Hall. 123. Schvaneveldt, S. J., Enkawa, T., & Miyakawa, M. (1991). Consumer Evaluation Perspectives of Service Quality: Evaluation Factors and Two-Way Model of Quality. *Total Quality Management*, 2(2), 149-161. 124. Shen, X. X., Tan, K. C., & Xie, M. (2000). An Integrated Approach to Innovative Product Development Using Kanô's Model and QFD. *European Journal of Innovation Management*, 3(2), 91-99. 125. Siegenthaler, K. L. (1994). Importance-performance analysis: application to senior programs evaluation. *Journal of Park Recreation Administration*, 12, 57-70. 126. Stevens, P., Knutson, B., & Patton, M. (1995). DINESERV: a tool for measuring service quality in restaurants. *Cornell Hotel and Restaurants Administration Quarterly*, 36(2), 56-60. 127. Tan, K. C., & Pawitra, T. A. (2001). Integrating SERVQUAL and Kanô's Model into QFD for Service Excellence Development. *Managing Service Quality*, 11(6), 418-430. 128. Tan, K. C., & Shen, X. X. (2000). Integrating Kanô's Model in the Planning Matrix of Quality Function Deployment. *Total Quality Management*, 11(8), 1141-1151. 129. Tonge, J., & Moore, S. A. (2007). Importance-satisfaction analysis for Marine-Park Hinterlands: A western Australian case study. *Tourism Management*, 28(3), 768-776. 130. Tontini, G., & Silveira, A. (2007). Identification of satisfaction attributes using competitive analysis of the improvement gap. *International Journal of Operations and Production*

Management, 27(5), 482-500. 131. Vroman, H. W., & Luchsinger, V. P. (1994). *Managing Organizational Quality*. Boston: Irwin. 132. Wu, B., & Sun, C. M. (2004). Fuzzy statistical analysis for human thought with fuzzy data. In *International workshop on fuzzy systems and innovational computing*, 389-397. 133. Yang, C. C. (2005). The refined Kano ' s model and its application. *Total Quality Management*, 16(10), 1127-1137. 134. Yavas, U., & Shemwell, D. J. (2001). Modified importance-performance analysis: An application to hospitals. *International Journal of Health Care Quality Assurance*, 14(3), 104-110. 135. Zadeh, L. A. (1965). Fuzzy sets. *Information and Control*, 8(3), 338-353. 136. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1990). *Developing Quality Service: Balancing Customer Perception and Expectations*. New York: The Free Press. 137. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46. 138. Zeithaml, V. A., & Bitner, M. J. (1996). *Services Marketing*. New York: McGraw-Hill. 139. Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30, 362-375. 140. Zhang, H. Q., & Chow, I. (2004). Application of importance-performance model in tour guides ' performance. Evidence from Mainland Chinese outbound visitors in Hong Kong. *Tourism Management*, 25(1), 81-91.