

**THE IMPACT OF CUSTOMER RELATIONSHIP
MANAGEMENT ON CALLER SATISFACTIONS IN
CUSTOMER CONTACT CENTERS: EVIDENCE FROM
MALAYSIA**

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**The Impact of Customer Relationship Management
on Caller Satisfactions in Customer Contact Centers:
Evidence from Malaysia**

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**A thesis submitted to Othman Yeop Abdullah
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University Utara Malaysia in fulfillment of the
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in Marketing**

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Aliyu Olayemi Abdullateef

ABSTRAK

Kajian sedia ada telah menunjukkan bahawa pengurusan perhubungan pelanggan (CRM) sebagai memberi peluang kepada para pelanggan dalaman dan luaran organisasi dalam menjelajah maklumat penting melalui integrasi sistem telefon syarikat, kumpulan sembang, respon suara Interaktif, penghantaran faks, elektronik pertukaran data, komunikasi suara melalui laman web dan e-mel sentuhan akan menghasilkan kepuasan pelanggan untuk pembelian produk baru, membantu dalam meningkatkan jualan dan jualan antara rangkaian dan mencipta kesetiaan pelanggan, nilai dan keuntungan. Walaupun semakin besar pengakuan pentingnya CRM, sangat sedikit kajian telah difokuskan pada kesan daripada aplikasi CRM terhadap prestasi perhubungan dengan pelanggan dalam pusat kawalan.

Penyelidikan empirikal ini menjelajah hubungan antara dimensi CRM, resolusi panggilan pertama, kualiti perkhidmatan yang dirasakan dan kepuasan pemanggil dalam kawalan dalaman pusat panggilan. Kerangka konseptual yang dibangunkan berdasarkan kajian sedia ada dan maklumat yang diperolehi daripada wawancara awal dengan pengurus pusat panggilan. Model kajian adalah meliputi kunci pembinaan CRM, orientasi pelanggan, organisasi CRM, pengurusan pengetahuan dan teknologi yang berpusat CRM dan juga meneliti kesan dari dimensi pada resolusi panggilan pertama (FCR), kualiti perkhidmatan yang dirasakan dan kepuasan pemanggil. Paling penting adalah, FCR dan kualiti perkhidmatan yang dirasakan dianggap sebagai anteseden penting bagi kepuasan pemanggil. Dalam penelitian kuantitatif, kajian terhadap 168 pengurus pusat panggilan di Malaysia dianalisis melalui model persamaan struktur yang memberikan tahap respons secara keseluruhan 43.3%. Penemuan kajian menunjukkan bahawa dari empat hipotesis positif antara dimensi CRM dan kepuasan pemanggil, tiga daripadanya disokong. Penemuan juga menunjukkan bahawa resolusi panggilan pertama (FCR) mempunyai pengaruh signifikan terhadap kepuasan pemanggil. Manfaat utama bagi para pengamal dan ahli akademik akhirnya dibincangkan dalam implikasi teori dan praktikal, manakala satu bidang kajian yang baru disyorkan untuk para penyelidik melaksanakannya di masa depan.

ABSTRACT

Available literatures have established customer relationship management (CRM) as giving opportunity to both internal and external customers of an organization in exploring critical information through the integration of company's telephone system, chat groups, Interactive voice response, facsimile transmission, electronic data interchange, voice over internet, web sites and e-mail touch points that will result in satisfying customer self services for new product purchases, assist in up-selling and cross selling and creating customer loyalty, value and profitability. Despite the enormous increasing acknowledgement of CRM importance, very little studies have focused on the impact of CRM applications on inbound customer contact center performance.

This empirical research explored the relationship between CRM dimensions, first call resolutions, perceived service quality and caller satisfactions within the inbound call centers. A conceptual framework was developed based on the extant literatures and information that were obtained from initial interviews with call center managers. The research model incorporated key CRM constructs; customer orientation, CRM organization, knowledge management and technology based CRM and also investigated the impact of these dimensions on first call resolution (FCR), perceived service quality and caller satisfaction. Importantly, FCR and perceived service quality were considered as critical antecedents to caller satisfaction. In this quantitative study, a survey of 168 call center managers in Malaysia was analyzed through structural equation modeling, constituting an overall 43.3% response rate. The research findings indicated that out of the four hypothesized positive relationship between CRM dimensions and caller satisfaction, three were supported. The findings also indicated that first call resolutions have significant influence on caller satisfactions. Key benefits for practitioners and academia was finally discussed under the theoretical and practical implications, while necessary suggestions on new area of research were recommended for future researchers.

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LIST OF ABBREVIATIONS

CRM:	Customer Relationship Management
CO:	Customer Orientation
CRMO:	CRM organization
KM:	Knowledge Management
TBCRM:	Technology Based CRM
FCR:	First Call Resolution
PSQ:	Perceived Service Quality
CS:	Caller Satisfaction
SQM:	Service Quality Measurement
CCAM:	CRM and Contact Center Association of Malaysia
CA:	Comparative Advantage
SEM:	Structural Equation Modeling
CSRs:	Customer Service Representatives
EFA:	Exploratory Factor Analysis
CFA:	Confirmatory Factor Analysis
KMO:	Kaiser-Meyer-Olkin
MSA:	Measure of Sampling Adequacy
VE:	Variance Extracted
AVE:	Average Variance Extracted
GFI:	Goodness-of-Fit Index
RMSEA:	Root mean square of approximation

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Chapter 1

1.1 Introduction

In the business world today, businessmen have recognized that customers are the core to any successful business. This is because both academic and industry researchers have proven that every business's success depends greatly on the effectiveness of such companies in managing its relationships positively with the current and potential customers (SQM, 2007; Brady, 2001; Berry, 1995 & 1983). Due to this unavoidable phenomenon, most organizations have been making it a must to integrate their team of managements and employees into knowing and practicing customer orientated approach (Dean, 2009; 2007; 2004; McNally, 2007; Sin, Alan and Frederick, 2005; Roland and Werner, 2005; Kohli, Jaworski and Kumar, 1993; Narver & Slater, 1990).

Efforts in understanding how managers could effectively establish and maintain long term positive relationships with their customers have led this current study into understanding the term "Relationship paradigm". As referred, relationship paradigm have been argued as all activities that are directed towards the establishment, development and maintaining successful relational exchanges between an organization, its customer and suppliers (Aihie & Bennani, 2007; Gummesson, 2004; Berry, 1995). This concept of relationship interfaces is centered on where and how individuals and organizations exchange information

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Reference

- Abdullateef, A. O., & Mokhtar, S. S. (2009). Determinant of Efficient Service Delivery and Caller Satisfaction: A Model of CRM Contact Center in Malaysia. Proceedings of the 2nd International Conference on Marketing and Retailing (Incomar), pp.18
- Abdullateef, A. O., Mokhtar, S. S., & Yusoff, R. Z (2010a). Exploratory study of CRM Measurements in Malaysia Customer Contact Centers; Proceedings of the 2nd International Conference on Arab-Malaysian Islamic Global Business and Entrepreneurship (Amgbe)
- Abdullateef, A. O., Mokhtar, S. S., & Yusoff, R. Z (2010b). Conceptual Model of the impacts of CRM Dimensions of Call Center Employees on Caller's First Call Resolution and Satisfaction; Proceedings of the 2nd International Conference on Technology and Operations Management (ICTOM).
- Abdullateef, A. O., Mokhtar, S. S., & Yusoff, R. Z (2010c). Customer Relationship Management Dimensions and Employee Job Satisfaction: Development of a Conceptual Model; Proceedings of the International Conference on Marketing (ICMAR).
- Abdullateef, A. O., Mokhtar, S. S., & Yusoff, R. Z. (2010d). Drivers of Efficient Service Delivery and Caller Satisfaction: A Model of CRM Customer Contact Centers in Malaysia: *International Journal of Management Studies*
- Abraham, P., & Taylor, E. (1999). Customer satisfaction and its measurement in hospitality enterprises. *International Journal of Contemporary Hospitality Management* 11 (7), pp. 326-339
- Acedo, F. J., Barroso, C. & Galan, J. L. (2006). The Resourced Based Theory: Disseminations and Main Trends. *Strategic Management Journal*, 2006; pp 621 – 636.
- Adam, L., & Michael, A. (2005). Customer relationship management: the case of a European bank. *Marketing Intelligence & Planning* 23(2), 2005 pp. 136-154.
- Agrawal, M.L. & Freytagl, P. V. (2000). Call Center Europe. Case, Denmark, 2000, 19 pp. Ref. No.: 500-019-1.

- Aihie, O., & Bennani, Az-E. (2007). An exploratory study of implementation of customer relationship management strategy. *Business Process Management Journal*: 13(1) pp. 139-164
- Ann, E., Patrick, T. H., & Frances, X. F. (1999). *Effective Call Center Management: Evidence from Financial Services*, The Wharton School, University of Pennsylvania
- Anand, K. J. (2008). Customer Satisfaction and Service Quality Measurement in Indian call centers. *Managing Service Quality*; 18(4), pp. 405-414.
- Anton, J. (2000). The past, present and future of customer access centers. *International Journal of Service Industry Management*, pp. 120-130.
- Antonio, L., Peter, J., & Luciano, P. (2005). Marketing Knowledge Management in Strategic Adoption of a CRM Solutions; Global Support and Applications in Europe: Rotterdam School of Management”, Universiti Degli Studi Milano.
- Archer, S. (1988). *Qualitative Research and the Epistemological Problems of the Management Disciplines; Competitiveness and the Management Process*: Basil Blackwell Oxford, pp 265 -300
- Bartlett, E. J., Kotrlik, W. J., Higin, C. C. (2001). Organizational Research; Determining Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance Journal*, (19)1
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, vol. 17(1), pp 99 – 120.
- Bernard, M., & Andy, N. (2004). *Managing and Measuring for Value; The case of call center performance*. Research Report by Fujitsu and Cranfield University.
- Bernard, M., & Stephen, P. (2004). Performance management in call centers: lessons, pitfalls and achievements in Fujitsu Services; *Emerald Group Publishing*, pp. 55-62.
- Berry, L.L. (1983). *Relationship marketing, in Shostack, G.L. et al. (Eds), Emerging Perspectives in Services Marketing*, AMA, Chicago, IL, pp. 25-8.
- Berry, L.L. (1995). Relationship marketing of services; Growing interest, emerging Perspectives. *Journal of Academy of Marketing Science*, Vol. 23(4), pp. 236-45.

- Bhimrao, G., & Janardan, V. (2008). Business process outsourcing: an approach to gain access to world-class capabilities; *Business Process Management Journal*, pp. 23-28.
- Bowen, H., P. & Wiersema, M. F. (1999). Matching method to paradigm in strategy research: Limitations of cross-sectional analysis and some methodological alternatives" *Strategic Management Journal*, 20(7), 625-636.
- Brady, M. K. (2001). Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach. *Journal of Marketing*, 65 (3), 34-49
- Brady, M. K., & Cronin J. J. (2001). Customer Orientation Effects on Customer Service Perceptions and Outcome Behaviors. *Journal of Service Research*, 3 (3), 241-251.
- Bulgarella, C. C. (2005). Employee Satisfaction and Customer Satisfaction; Guidestar research, *white paper*, February 2005
- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS; Basic Concepts, Application and Programming* 2nd edition; Routledge Taylor and Francis Group New York
- Callcentre.net, (2008). White papers and Case Studies: Retrieved on 14th of October, 2009 from <http://www.callcentres.net>
- Callcentre.net, (2003). The 2003 Malaysia Contact Centre Industry Study: Retrieved on 14th of October, 2009 from <http://www.callcentres.net>
- Cavana, R., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: qualitative and quantitative methods*. Singapore: Markono Print Media Ltd.
- Centerserve, (2010). *Benchmarking Report from Centerserve and the Call Center Learning Center*. <http://www.centerserve.com>
- Chin, W. W. (1998b). The partial least squares approach for structural equation Modeling", In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah, NJ: Lawrence Erlbaum Associates.
- Christian, L. Schaupp (2005). A Conjoint Analysis of Online Customer Satisfaction; *Journal of Electronic Commerce Research*, 6(2), 2005

- Churchill, G. A., Jr., & Brown, T. J. (2004). *Basic marketing research* (5th ed.). Sydney: South-Western College.
- Churchill, G. A., & Peter, J. P. (1984). Research design effects on the reliability of rating scales: A meta-analysis. *Journal of Marketing Research*, Volume 21(4), 360-375.
- Clark N. (1989). *Writing up the Doctoral Thesis; A Handbook for Management Researchers*; Published by Cranfield School of Management, Bedfordshire, England, pp 313-320, 1989.
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). New York: John Wiley & Sons. Cohen, J., & Cohen, P. (1983). *Applied multiple regression and correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Coltman, T. R. (2007). Can Superior CRM Capabilities Improve Performance in Banking. *Journal of Financial Services Marketing*, 2007, 12(2), pp 102 – 114.
- Cronin J. J., & Taylor, S.A. (1992). Measuring service quality: a re-examination and extension, *Journal of Marketing*, (56) pp.55-68
- Cronin J. J., & Taylor S.A. (1994). SERVPERF versus SERVQUAL: Reconciling Performance Based and Perceptions Minus Expectations Measurement of Service Quality, *Journal of Marketing*, Vol. 58, No. 1 (Jan., 1994), pp. 125-131
- CRM and Contact Center Association of Malaysia, (2009). *Annual Industry Report*: (accessed 2009, available at (CCAM): <http://www.ccam.com.my>)
- David, J. F., & Wendy, L. C. (2009). A multi-layered approach to CRM implementation. An integration perspective”, *European Management Journal* (2009).
- Dean, A. M. (2002). Service quality in call centers: implications for customer loyalty; *Managing Service Quality Journal*, pp. 414-423.
- Dean, A. M. (2007). The impact of customer orientation of call center Employees on customers’ Affective Commitment and Loyalty; *Journal of Service Research*, Volume 10, no 2. Pp. 161 – 173
- Dean, A. M. (2009). Frontline employees' views on organizational factors that affect the delivery of service quality in call centers, *Journal of Service Marketing*, 23/5 (2009), 326 – 337.

- Day, G. S., Deighton, J., Narayandas, D., Gummesson, E., Hunt, S. D., Prahalad, C. K., et al. (2004). Invited commentaries on "Evolving to a new dominant logic for marketing". *Journal of Marketing*, 68(1), 18-27.
- Day, G. S., & Montgomery, D. B. (1999). Charting new directions for marketing. *Journal of Marketing*, 63(Special Issue), 3-13.
- Doellgast, V., Batt, R. Sørensen, O. H. (2009). Introduction: Institutional Change and Labour Market Segmentation in European Call Centres. *European Journal of Industrial Relations*; 15 (4) pp 349–371
- Eid, R. (2007). Towards a Successful CRM Implementation in Banks; An Integrated Model: *The Service Industry Journal*, 27 (8), pp. 1021 - 1039
- Eric, P. J., Tom A. B., & Charles, E. M. (2006). Operational challenges in call center industry; a case study and resource based framework; *Managing Service Quality Journal*, pp. 477-500.
- Falk, R. F., and Miller, N. B. (1992). *A primer for soft modeling*, Akron, OH, USA: The University of Akron Press.
- Feinberg, A. R., Leigh, H., Rajesh, K., & IkSuk, K. (2002). Operational determinants of caller satisfaction in the banking/financial services call center; *International Journal of Bank Marketing*, pp. 174-180.
- Feinberg, R. A., Kim, I. S., Hokama, L., de Ruyter, K., and Keen, C. (2000). Operational determinants of caller satisfaction in the call center", *International Journal of Service Industry Management*, Vol. 11 No. 2, pp. 31-41.
- Fen, Y. S., & Lian, K. M. (2006). Service and Customer Satisfaction; Antecedent of Customer's re-patronage intentions: *Sunway Academic Journal*
- Florian W., Heiner E., & Maren W. (2007). Does the employee–customer satisfaction link hold for all employee groups?; *Journal of Business Research* 60, pp. 690–697.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), pp. 219 – 245
- Foo, C. T. (2007). Epistemology of strategy: some insights from empirical analyses Chinese Management Studies Vol. 1 No. 3, 2007, pp. 154-166
- Ford, D. (1980). The development of buyer-seller relationships in industrial markets, *European Journal of Marketing*, 14(5/6), pp. 339-53.

- 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*; 60(4)
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error”, *Journal of Marketing Research*, 18(1), 39-50.
- Fox, T. and Stead, S. (2001). Customer Relationship Management: Delivering the Benefits, *White Paper*, CRM (UK) and SECOR Consulting, New Malden
- Francesco, C., & Massimo, D. (2009). Ontology for e-learning: a case study, *Interactive Technology and Smart Education* Vol. 6 No. 1, 2009 pp. 6-22
- Frost & Sullivan (2009). *Contact Center Outsourcing Trends in the Asia Pacific Market*, Industry Report: 2008 – 2011
- Garnett, A. M., & Reiman, M. (2002). *Designing a Call Center with Impatient Customers*: Davidson Faculty of Industrial Engineering and Management, Technion, Haifa 32000, ISRAEL
- Gebert, H., Geib, M., Kolbe, L., & Brenner, W. (2003). “Knowledge-enabled customer relationship management: integrating customer relationship management and knowledge management concepts 1,” *Journal of Knowledge Management*, vol. 7(5), p. 107-123
- Georgoff & R. M. (1986). Manager's Guide to Forecasting. *Harvard Business Review*, Vol. 1 (January-February 1986), p. 110.
- González, J V., & Garazo, T. G. (2006). Structural relationships between organizational service orientation, contact employee job satisfaction and citizenship behavior International; *Journal of Service Industry Management* Vol. 17 No. 1, 2006 pp. 23-50
- Grant, R. M. (1996). Toward a Knowledge Based Theory of the Firm; *Strategic Management Journal*, 38(5), pp 109 – 122
- Grayson, K., & Ambler, T. (1999). The dark side of long-term relationships in marketing services. *Journal of Marketing Research*, 36(1), 132-141
- Gulliksen, H (1936). The Content Reliability of a test: *Psychometrika*, 1(3)
- Gummesson, E. (2002a). Practical Value of Adequate Marketing Management

- Theory. *European Journal of Marketing*, 36 (March), 325–49.
- Gummesson, E. (2002b). Relationship Marketing in the New Economy. *Journal of Relationship Marketing*, 1 (1), 37–57.
- Gummesson, E. (2002c). *Total Relationship Marketing*, 2d ed. Oxford: Butterworth-Heinemann.
- Gummesson, E. (2004). Return on relationships (ROR); the value of relationship marketing and CRM in business-to-business contexts. *Journal of Business and Industrial Marketing*, 19(2). .pp. 136-148
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Andersen, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Andersen, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hanke, J., and Reitsch, A. (1992), “*Business Forecasting: Fourth Edition*”. New York: Simon and Schuster.
- Hau, K. T., & Marsh, H. W. (2004). The use of item parcels in structural equation modeling: Non-normal data and small sample sizes” *British Journal of Mathematical & Statistical Psychology*, Volume (57), 327-351.
- Heskett J. L, Sasser W, E, Jones T. O, Loveman G. W., & Schlesinger L. A (1994). Putting the service point chain to work; *Harvard Business Review* 72 (2), pp 163 – 173.
- Hu, L.-T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 76-99). Thousand Oaks, CA: Sage Publications.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.
- Jarvenpaa, S. L. & Ives, B. (1991). Executive Involvement and Participation in the Management of Information Technology: *MIS Quarterly report*, June 1991, pp 205-228.

- Jayachandran, S., Sharma, S., Kaufman, P., & Raman, P. (2005). The role of relational information processes and technology use in customer relationship management. *Journal of Marketing*, 69(4), 177-192
- John, G., and Reve, T. (1982). The reliability and validity of key informant data from dyadic relationships in marketing channels. *Journal of Marketing Research*, 19(4), 517-524
- Kaiser, H.F. (1974). An index of factorial simplicity. *Psychometrika*, Vol. 39, pp. 31-6
- Klassen, K. & Rohleder, T. (2001). Combining operations and Marketing to manage capacity and demand in services. *The Service Industries Journal*, Volume 21 (2), pp 5 – 29.
- Kode R., Martin W., & Richard F. (2001). Role Stress in Call Centers: Its Effect on Employee performance and Satisfaction. *Journal of Interactive Marketing*, 15(2), pp 23 – 33.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Kohli A.K., Jaworski B. J., and Kumar A. (1993). MARKOR: A measure of Market Orientation. *Journal of Market Research*; pp. 466 – 472.
- Kotler, P., & Gary, A. (2004). *Principles of Marketing Tenth Edition*, Pearson Prentice Hall.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kyootai Lee & Kailas Joshi (2007). Customer Satisfaction with Technology Mediated Service Encounter. *Journal of Information Technology Management* 28(20)
- Lee, J. (2004). Discriminant analysis of technology adoption behavior: A case of Internet technologies in small business. *The Journal of Computer Information Systems*, 44(4), 57-66.
- Lee, Y K, Nam, J, H., and Park, D., H (2006). What factors influence customer-

- oriented prosocial behavior of customer-contact employees? *Journal of Services Marketing* 20/4 (2006) 251–264
- Leila, A. H., Jay, E. A., & Richard V, M. (2005). Resource Based View of Knowledge Management for Competitive Advantage. *The Electronic Journal of Knowledge Management*, 3(2), pp 75 – 86.
- Leslie, T. F. (2010). Identification and Differentiation of Urban Centers in Phoenix through a Multi-Criteria Kernel-Density Approach. *International Regional Science Review*, 33(2), pp 205-235
- Levin, G. (2007a). Capture the customer experience by tapping IVR: *Call Center Magazine*, 20(2), 50
- Levin, G. (2007b). Measuring the things that matter: *Call Center Magazine*, 20(3), 24
- Lukas, B. A., & Ferrell, O.C. (2000). The effect of market Orientation on product Innovation. *Journal of Academy of Marketing Science*, 28 (2), pp. 238 – 246
- Mahoney J, T. & Pandian J. R. (1992). The Resource Based View within the Conversation of Strategic Management; *Strategic Management Journal*, Volume 13, pp 363 – 380.
- Makarem, S. C., Mudambi, S. M. & Podoshen, J. S. (2009). Satisfaction in technology-enabled service encounters. *Journal of Services Marketing*, 23(3) 134–144
- Malhotra, N. K., Hall, J., Shaw, M., & Oppenheim, P. (2006). *Marketing research: An applied orientation* (3rd ed.). Frenchs Forest: Prentice Hall.
- Matthews, S. S., & Lawley, M. (2006). Improving customer service: issues in customer contact management; *European Journal of Marketing* 40(1/2) 2006 pp. 218-232.
- McNally, R., (2007). An exploration of call centre agents' CRM software use, customer orientation and job performance in the customer relationship maintenance phase. *Journal of Financial Services Marketing*, 12 (2) 169 – 184.
- Menon A, Bharadwaj S, Adidam, P, & Edison S, (1999). Antecedent and Consequences of Marketing Strategy Making; A model and a Test. *Journal of Marketing*, 7:2, pp 1 – 13

- Meso, P., & Smith, R. (2000). A Resource Based View of Organizational Knowledge Management Systems. *Journal of Knowledge Management*, 4(3), pp 224 – 231.
- Meyer, M., & Kolbe, L. M. (2005). Integration of customer relationship management: status quo and implications for research and practice. *Journal of strategic Marketing* 13 175–198
- Miciak, A., & Desmarais, M. (2001). Benchmarking service quality performance at Business to business and business-to-consumer call centers. *The Journal of Business and Industrial Marketing*, 16 (5), pp. 339-54.
- Miller, D., & Shamsie J, (1996). The Resource Based View of The Firm in Two Environments: The Hollywood Film Studios From 1936 to 1965. *Academy of Management journal*, 39(3), pp 519 – 543.
- Mohr, J. I. (1998). Conceptualizing total quality orientation: *European Journal of Marketing*, 32 (2), pp. 13-22.
- Moller, K., & Halinen, A. (2000). Relationship Marketing Theory: Its Roots and Direction, *Journal of Marketing Management*, 16 pp 29-54
- Moorman, C., Deshpandé, R., and Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, Volume 57(1), 81-101.
- Narver, J.C., & Slater, S.F. (1990). The effect of a market orientation on business Profitability. *Journal of Marketing*, October, pp. 20-36.
- Nguyen, T. H., Joseph S. S., & Michael, N. (2007). Strategies for successful CRM Implementation. *Journal of Information Management & Computer Security* Vol. 15 No. 2, 2007 pp. 102-115
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Parasuraman, A., Grewal, D., & Krishnan, R. (2004). *Marketing Research*. Boston: Houghton Mifflin.
- Patwardhan, A., Noble, S. M. & Nishihara, C. M. (2009). The use of strategic deception in Relationship. *Journal of Services Marketing*; 23(5) pp. 318–325
- Pei-Yu, S. C., & Lorin, M. H. (2002). Measuring Switching Costs and the

Determinants of Customer Retention in Internet-Enabled Businesses: A Study of the Online Brokerage Industry. *Information Systems Research*, 13(3), September 2002, pp. 255–274

- Pinsonneault, A., & Kraemer, K. L. (1993). Survey research methodology in management information systems: An assessment. *Journal of Management Information Systems*, 10(2), 75-105.
- Priem, R. L., & Butler, J. E. (2001). Is The Resource-Based View A Useful Perspective For Strategic Management Research? *Academy of Management Review*, 26,(1), pp. 22-40.
- Rajshekhar, G. J., Charles L. M., & Robert, B. Y. (2006). Marketing research, market orientation and customer relationship management: a framework and implications for service providers. *Journal of Services Marketing* 20/1 (2006) 12–23
- Ravipa, L., & Mark, S. (2004). Determinants of Customer Satisfaction: A Model of Technology Integration in Thailand's Insurance Industry; Asia Academy of Management fourth conference, (2004).
- Raykov, T., & Marcoulides, G. A. (2006). A First Course in Structural Equation modeling 2nd Edition; *California State University, Fullerton* Lawrence Erlbaum Associates, Publishers
- Richard, J. E. (2007). *The Impact of Customer Relationship Management (CRM) Technology on Business-to-Business Customer Relationships*: Unpublished PhD Thesis submitted at Victoria University of Wellington for the degree of Doctor of Philosophy in Marketing, New Zealand
- Richard, J. E., Thirkell, P. C., Huff, S. L. (2007). An Examination of Customer Relationship Management (CRM) Technology Adoption and its Impact on Business-to-Business Customer Relationships; *Total Quality Management* Vol. 18, No. 8, 927–945
- Richardson, H. and K. Richardson (2002). Customer relationship management systems (CRM) and information ethics in call centres\`You are the weakest link. Goodbye!', *Australian Journal of Information Systems*, 9 (2), 2002, 166-171.
- Rockart F. J. (1986). *A Primer on Critical Success Factors*; published in, *The Rise of Managerial Computing*: The Best of the Center for Information Systems Research, edited with Christine V. Bullen, Homewood, IL: Dow Jones-Irwin, 1986.

- Rodoula, T. (2005). Perceived Quality Levels and their Relation to Involvement, Satisfaction, and Purchase Intentions. *Marketing Bulletin*, 2005, 16, Research Note 4
- Roland, K., & Werner, H. K. (2005). Managing overall service quality in customer care centers; *International Journal of Service Industry Management*, pp. 135-151.
- Roger, A. K., & Robert, A. P. (2001). *Strategic Marketing problems; Cases and Comments*; Prentice Hall.
- Rogers, D. J., Clow, E. K., & Kash, J. T. (1994). Increasing Job Satisfaction of Service Personnel. *Journal of Services Marketing*, Vol. 8 No. 1, 1994, pp. 14-26
- Satya, S., Rajkumar, R., Ashutosh, T., & Basim, M. (2007). Categorization of Customer and Advisor in Contact Centers; *International Journal of Computational Intelligence Research* 3(3) (2007), pp. 193-204.
- Shire, K. A., Schönauer, A. Valverde, M. and Mottweiler, H. (2009). Collective Bargaining and Temporary Contracts in Call Centre Employment in Austria, Germany and Spain. *European Journal of Industrial Relations*; 15 (4) pp 437–456
- Sin, L. Y., Alan C, T., and Frederick H, Y (2005). CRM: conceptualization and scale Development. *European Journal of Marketing*, 39(11/12), pp. 1264 – 1290
- Sin, L. Y. M., Tse, A. C. B., Yau, O. H. M., Lee, J. S. Y., & Chow, R. P. M. (2002). The effect of relationship marketing orientation on business performance in a service-oriented economy. *Journal of Services Marketing*, 16(7), 656-676.
- Soon, H. S. (2007). *An Empirical Analysis on the operational Efficiency of CRM call centers in Korea*; Call center Industry Research Center.
- Sørensen, O. H. & Weinkopf, C. (2009). Pay and Working Conditions in Finance and Utility Call Centres in Denmark and Germany. *European Journal of Industrial Relations*; 15(4) pp 395–416
- Stacey, L. B. (2006). Your Top 10 Outsourcing Problems; Medical outsourcing magazine.<http://www.mpo-mag.com/articles/2006/10/your-top-10-outsourcing-problemssolved>
- SQM, G. C, (2007). *First Call Resolution Revisited: Why it still matters most, and*

how to improve it; Industry Reports

- SQM, G. C. (2005). *Call Center Employee Satisfaction and Customer Satisfaction Link*, Industry Reports
- Stephen J., & Michael B., (2008). *A Review of Call Center Measurements*; Nova Southeastern University, USA.
- Stern, B. B. (1997). Advertising intimacy: Relationship marketing and the services consumer. *Journal of Advertising*, 26(4), 7-19.
- Sterne, G. D. (2010). Media perceptions of public relations in New Zealand. *Journal of Communication Management*, 14 (1), pp. 4-31
- Storbacka, K., Strandvik, T., & Grönroos, C. (1994). Managing customer relationships for profit: The dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21-38.
- Sue, p., & Morin, P. (2001). A Strategic Framework for CRM," (accessed October 10, 2010), [available at <http://www.crm-forum.com>].
- Sun, B., & Shibo, Li. (2005). Improving effectiveness of customer service in a cost-efficient way with an empirical application to the service allocation decisions with out-sourced centers. Working paper, Tepper School of Business, Carnegie Mellon University, 2005. (Available at <<http://business.tepper.cmu.edu/display>>)
- Taylor S.A., & Baker T.L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, (70)2
- Taylor, S. A., & Gary L. H. (2002). The impact of loyalty with e-CRM software and e-services, *International Journal of Service Industry Management*, 13 (5), 452-474.
- Teas R.K., (1993a). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, 57(4), pp.18-34
- Teas, R.K. (1993b). Consumer expectations and the measurement of perceived service Quality. *Journal of Professional Services Marketing*, 8 (2), pp.33-54
- Teehan, R., & Tucker, W. (2010). A simplified lean method to capture customer Voice. *International Journal of Quality and Service Sciences*; 2 (2), pp. 175-188

- Tellefsena, T., & Thomas, G. P. (2005). The antecedents and consequences of organizational and personal commitment in business service relationships. *Industrial Marketing Management*, 34(1), 23- 37.
- The Data Warehousing Institute (2009). Operational Linkages between Analytical and Operational CRM. (Accessed June15, 2009, available at "www.dw-institute.com".)
- Timothy, L. K., Lerzan, A., Tor W. A., Bruce, C. & Barry, J. W. (2006). Call center satisfaction and customer retention in a co-branded service context. *Managing Service Quality*, pp.269-289.
- Too, L. H. Y., Souchon, A. L., & Thirkell, P. C. (2001). Relationship marketing and customer loyalty in a retail setting: A dyadic exploration. *Journal of Marketing Management*, 17(3/4), 287-319.
- Van, B., Gerrit, H., Gary, L., & Kacker, M. (2002). Informants in organization marketing research: Why use multiple informants and how to aggregate responses. *Journal of Marketing Research*, Vol. 39(4), pp.469 – 478
- Vargo, S. L., & Lusch, R. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.
- Venkatesan, R., & Kumar, V. (2004). A customer lifetime value framework for customer selection and resource allocation strategy. *Journal of Marketing*, 68(4), 106-125.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management. The Academy of Management Review*, 11(4), 801-814.
- Venugopal, V., & Baets, W. (1994). Neural networks & their applications in marketing management. *Journal of Systems Management*, 45(9), 16-21.
- Verhoef, P. C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of Marketing*, 67(4), 30-45.

- Verhoef, P. C., Franses, P. H., & Hoekstra, J. C. (2001). The impact of satisfaction and payment equity on cross-buying: A dynamic model for a multi-service provider. *Journal of Retailing*, 77(3), 359-378.
- Von, K., Roos J., & Slocum, K (1994). An essay on corporate epistemology. *Strategic Management Journal: Special Issue*, pp.53-70.
- Wang, C., Huang, Y., Chen, C., & Lin, Y, (2006). The influence of customer relationship management process on management performance: *The International Journal of Organizational Innovation*
- Wortman, V. (2001). The future of enterprise CTI, *Business Communications Review*, 31 (2), 46-49.
- Wernerfelt, B. (1984). A Resource Based View of the Firm; *Strategic Management Journal*, Vol 5, pp 171 – 180.
- Wen-Bao, L. (2007). The exploration of customer satisfaction model from a comprehensive perspective: Expert Systems with Applications, *International Journal of archive*
- Whiting, A. & Donthu, N (2009). Closing the gap between perceived and actual waiting times in a call center: results from a field study". *Journal of Services Marketing*, 23/5 (2009) 279–288
- Winiiecki, D. J. (2009). The Call Centre and its Many Players", *Organization Articles*; 16(5): 705–731
- Yim, F. H., Anderson, R. E., & Swaminathan, S (2005). Customer Relationship Management: Its Dimensions and Effect on Customer Outcomes; *Journal of Personal Selling & Sales Management*, vol. XXIV, no. 4 (fall 2004), pp. 265–280.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed. Vol. 5)", Thousand Oaks: Sage.
- Yueh, C. L., Lee, Y., & Barnes, F., B, (2010). The effects of leadership styles on Knowledge based customer relationship management implementation. *International journal of management and marketing research*, 3(1), pp 1-19
- Zeithaml, B., & Parasuraman A (1993). The Nature and Determinants of Customer Expectations of Service," *Journal of the Academy of Marketing Science*, pp. 1-12

Zeithaml, A. V., Parasuraman A., and Berry L. L (1985). Problems and Strategies in Services Marketing. *Journal of Marketing*, 49(2), pp. 33-46

Zikmund, W. G., McLeod, R. J., & Gilbert, F. W. (2003). *Customer relationship management: Integrating marketing strategy and information technology*. Hoboken, NJ: John Wiley & Sons.