

**DETERMINANTS OF LOYALTY AND THE EFFECTS OF SWITCHING COST  
TOWARDS MOBILE TELECOMMUNICATION SERVICE PROVIDERS IN  
MALAYSIA**

**By**

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## ABSTRACT

Customer loyalty has been a highly sought after topic among academicians and industry practitioners to enable growth and competitiveness enhancement. This research investigated the challenges plaguing the mobile telecommunication industry, namely fluctuating revenue despite growth in the number of users, sliding average revenue per user (ARPU) and reduced repeat purchase, in addition to scarcity in analysing switching cost's mediating effect. These impose serious concerns that link to dwindling customer loyalty. This research also compared the preferences of postpaid and prepaid users pertaining to satisfaction, trust, service quality and switching cost towards customer loyalty. This study utilized a quantitative approach where the stratified systematic random sampling was employed and data was collected in the Klang Valley over a time frame of 105 days. The instrument used was a self-administered questionnaire whereas structural equation modelling (SEM) was exercised for statistical analysis. The findings revealed that service quality and switching costs were the driving forces of loyalty while service quality, too, advocates switching cost. Moreover, service quality and loyalty were found to be the only constructs mediated by switching cost. Satisfaction and trust were however, found not to predict loyalty and switching cost. In fact, there were no mediating effects of switching cost on satisfaction and loyalty relationship, similar to trust and loyalty relationship. Meanwhile, service quality and loyalty relationship were found to be important among postpaid users, contrary to prepaid users. The overall findings affirmed service quality as the key component of customer loyalty and switching cost; likewise they clarified that loyalty does not need to transpire in a continuum manner. These outcomes are immensely valuable to practitioners for strategizing and executing tailor-made plans while enhancing knowledge pertaining to switching cost and customer loyalty.

**Keywords:** customer loyalty, switching cost, service quality, mobile telecommunication industry

## ABSTRAK

Kesetiaan pelanggan merupakan topik yang kerap mendapat perhatian dalam kalangan ahli-ahli akademik dan pengamal industri untuk pertumbuhan serta peningkatan daya saing. Oleh yang demikian, kajian ini mengkaji cabaran-cabaran yang membebankan industri telekomunikasi mudah alih, iaitu penguncupan ARPU dan penurunan pembelian semula, serta ketandusan dalam menganalisis kos pemindahan sebagai pengantara. Kesemua cabaran ini dilihat berkait rapat dengan penurunan kesetiaan pelanggan. Selain itu, kajian ini cuba untuk membandingkan kecenderungan pengguna pasca bayar dan pra bayar mengenai kepuasan, kepercayaan serta kualiti perkhidmatan dan kos pemindahan terhadap kesetiaan pelanggan. Kajian ini menggunakan pendekatan kuantitatif iaitu persampelan rawak sistematik berstrata dan data diperolehi dari Lembah Klang dalam tempoh 105 hari. Instrumen yang digunakan adalah borang soal selidik sendiri manakala permodelan persamaan struktur (SEM) telah digunakan untuk menganalisis data secara statistik. Dapatan kajian ini memaparkan bahawa kualiti perkhidmatan dan kos pemindahan merupakan penggerak kepada kesetiaan, di samping itu, kualiti perkhidmatan juga menyokong kos pemindahan. Tambahan pula, kualiti perkhidmatan dan kesetiaan hanya menjadi pengantara kepada kos pemindahan. Sebaliknya, kepuasan dan kepercayaan didapati tidak signifikan terhadap kesetiaan dan kos pemindahan. Malah, kos pemindahan tidak mempunyai kesan perantara terhadap hubungan kepuasan dan kesetiaan, perihal yang sama didapati dalam hubungan antara kepercayaan dan kesetiaan. Sementara itu, hubungan kualiti perkhidmatan dan kesetiaan dilihat amat penting kepada pengguna pasca bayar berbanding dengan pengguna pra bayar. Secara keseluruhannya, dapatan kajian mengesahkan bahawa kualiti perkhidmatan merupakan komponen utama dalam kesetiaan pelanggan dan kos pemindahan, dan turut menjelaskan bahawa kesetiaan pelanggan tidak perlu berlaku secara berterusan. Hasil kajian ini amat berharga kepada pengamal industri dalam membentuk strategi dan merangka pelan yang bersesuaian serta menambahkan pengetahuan terhadap kos pemindahan dan kesetiaan pelanggan.

**Kata kunci:** kesetiaan pelanggan, kos pemindahan, kualiti perkhidmatan, industri telekomunikasi mudah alih

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

Customer loyalty topic has attracted much interests in the past, prompting multi-definitions in the quest to understand the crux of it. Nevertheless, it was Oliver (1999), who gave a more meaningful understanding to loyalty by highlighting the multi-facets of loyalty while defining it as ‘a deeply held commitment to repurchase and repatronize a preferred product or service consistently in future causing repeat purchases,’ despite situational influences and marketing efforts having the potential to influence switching behaviour. Loyalty is obviously of greater interest among academicians and practitioners for, its proximity to profitability (Chadha & Kapoor, 2009; Cheng, Lai & Yeung, 2008) especially in highly competitive markets because acquiring customers alone is viewed as not a guarantee of long-term success (Brunh & Grund, 2000; Cheng et al., 2008), but gaining customers loyalty would surely encourage continued patronage as loyal customers will not hesitate to pay premium prices, eventually promoting the business while fostering a firm’s survival (Aydin & Ozer, 2005; Cheng et al., 2008). In a highly competitive industry such as mobile telecommunication, one of the ways to maintain a profitable business lies in offering products that fit the customers’ tastes and preferences, skewing the offerings to each category of customers such as postpaid and prepaid is deemed more beneficial as each group have shown a tendency to behave differently (Galperin & Marsical, 2007; Shrivastava & Israel, 2010). Furthermore, one must also be sure that these offerings are done and delivered better than competing providers, to ensure that the company



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## REFERENCES

- Adam, J.L., Wickstrom, S.L., Burgess, M.J., Lee, P.P., & Escarce, J.J. (2003). Sampling patients with physician practices and health plans: Multistage cluster samples in health services research. *Health Services Research, 38*(6), 1625-1640
- Adoyo, B., Ondoro, C.O., Ojera, P.B., & Abong, O. B. (2012). The relationship between customer service quality and customer loyalty among retail pharmacies in Western Kenya. *Business and Management Review, 2*(3), 11-21
- Agustin, C., & Singh, J. (2005). The curvilinear effects of customer loyalty determinants in relational exchanges. *Journal of Marketing Research, 42*(1), 96-108
- Ahmed, I., Nawaz, M. M., Usman, A., Shaukat, M. Z., Ahmad, N., & Iqbal, H. (2010). Impact of service quality on customers' satisfaction: Empirical evidence from telecom sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 1*(12), 98-113
- Akbar, M. M., & Parvez, N. (2009). Impact of service quality, trust and customer satisfaction on customer loyalty. *ABAC Journal, 29*(1), 24-38.
- Akin, M. (2011). Predicting preferences of university students for prepaid vs postpaid cell phone service plan. *Expert Systems with Applications, 38*, 9207-9210. doi:10.1016/j.eswa.2011.01.122
- Al-Hawari, M. (2014). Emotional stability and switching barriers in the retail banking context. *Managing Service Quality, 24*(5), 469-486. doi:10.1108/MSQ-12-2013-0280
- Alnsour, M.S., & Alzyadat, M.A. (2014). Using SERVQUAL to assess the quality of service provided by Jordanian telecommunications sector. *International Journal of Commerce and Management, 24*(3), 209-218. doi: 10.1108/IJCoMA-03-2012-0021
- Anand, P., Holbrook, M.B., & Stephens, D. (1988). The formation of affective judgments: the cognitive- affective model versus the independence hypothesis. *Journal of Consumer Research, 15*(3), 386-391
- Anderson, E. W., Fornell, C. & Lehmann, D.R. (1994). Customer satisfaction, market share and profitability. *Journal of Marketing, 58*, 53-66
- Anderson, R.E., & Srinivasan, S.S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing, 20*(2), 123-138. doi:10.1002/mar.10063

- Anton, C., Camarero, C. & Carrero, M. (2007). Analysing firms failures as determinants of consumer switching intentions. The effect of moderating factors. *European Journal of Marketing*, 41(1/2), 135-158. doi:10.1108/03090560710718157
- Aoki, R., & Small, J. (1999). The economics of number portability, switching costs and two-part tariffs. Proceeding of the CRC working paper, University of Auckland, Auckland
- Asyraf, W.M., Ahmad, S. & Mamat, I. (2014). Testing the mediation effect using covariance based structural equation modelling with AMOS. *American International Journal of Research in Humanities, Arts and Social Sciences*, 6(2), 186-190.
- Awang, Z. (2013). Structural equation modelling using AMOS graphics. Malaysia, UITM Press.
- Aydin, S., & Ozer, G. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *European Journal of Marketing*, 39(7/8), 910-925. doi: 10.1108/03090560510601833
- Aydin, S., & Ozer, G. (2006). How switching cost affects subscriber loyalty in the Turkish mobile phone market: An exploratory study. *Journal of Targeting, Measurement and Analysis for Marketing*, 14(2), 141-155
- Aydin, S., Ozer, G., & Arasil, O. (2005). Customer loyalty and the effect of switching costs as a moderator variable. A case in the Turkish mobile phone market. *Marketing Intelligence and planning*, 23(1), 89-103. doi:10.1108/02634500510577492
- Balaji, M. S. (2009). Customer satisfaction with Indian mobile services. *The IUP Journal of Management Research*, 8(10), 53-62
- Baldinger, A. L., & Rubinson, J. (1996). Brand loyalty: the link between attitude and behavior. *Journal of Advertising Research*, 36(6), 22-34
- Ball, D., Coelho, P.S., & Machas, A. (2004). The role of communication and trust in explaining customer loyalty. *European Journal of Marketing*, 38(9/10), 1272-1293. doi:10.1108/03090560410548979
- Bansal, H. S., & Shirley, F. T. (2002). Investigating interactive effects in the theory of planned behaviour in a service-provider switching context. *Psychology and Marketing*, 19(5), 407-425
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Social Psychology*, 51(6), 1173-1182
- Bass, F.M. (1974). The theory of stochastic preference and brand switching. *Journal of Marketing Research*, 11(1), 1-20

- Bayraktaroglu, G., & Atrek, B. (2010). Testing the superiority and dimensionality of SERVQUAL vs. SERVPERF in higher education. *The Quality Management Journal*, 17(1), 47-59
- Bennett, R. (2001). A study of brand loyalty in business- to- business service sector. Unpublished doctoral thesis, University Of Queensland, Brisbane
- Bharadwaj, S., Varadarajan, P. R. & Fahy, J. (1993). Sustainable competitive advantage in service industries: a conceptual model and research propositions. *Journal of Marketing*, 57(4), 83-99
- Bhattacharya, C.B., Fader, P.S., Lodish, L.M., & Desarbo, W.S. (1996). The relationship between the marketing mix and share of category requirements. *Marketing Letters*, 7 (1), 5-18
- Bhatty, M., Skinle, R., & Spalding, T. (2001). Redefining customer loyalty, the customer's way. *Ivey Business Journal*, 65(3), 13-17
- Blery, E., Batistatos, N., Papastratou, E., Remoundaki, G., & Retsina, M. (2009). Service quality and customer retention in mobile telephony. *Journal of Targetting, Measurement and Analysis for Marketing*, 17(1), 27-37.
- Blut, M., Evanschitzky, H., Vogel, V., & Ahlert, D. (2007). Switching barriers in the four- stage loyalty model. *Advances in Consumer Research*, 34, 726-734.
- Boohene, R., & Agyapong, G.K.Q. (2011). Analysis of the antecedents of customer loyalty of telecommunication industry in Ghana: The case of Vodafone (Ghana). *International Business Research*, 4(1), 229-240
- Brady, M.K., Voorhees, C.M., & Brusco, M.J. (2012). Service sweethearting: It's antecedents and customer consequences. *Journal of Marketing, American Marketing Association*, 76, 81-98
- Bruhn, M., & Grund, M.A. (2000). Theory, development and implementation of national customer satisfaction indices: The swiss index of customer satisfaction ( SWICS ). *Total Quality Management*, 11(7), 1017-1028. doi:10.1080/09544120050135542
- Buehler, S., & Haucap, J. (2004). Mobile Number Portability. *Journal of Industry, Competition and Trade*, 4(3), 223-238
- Bunmak, S. (2012). Cell phone networks and migrant networks: The case of Nanyu migrant workers in Malaysia. *Malaysia Journal of Society and Space*, 8(1), 38-49
- Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: a typology, antecedents and consequences. *Journal of the Academy of Marketing Science*, 31(2), 109-26. doi:10.1177/0092070302250897

- Business Monitor International (n.d.). Malaysia Telecommunications Report, Q1, 2013. Retrieved April, 20, 2013 from [http://www.slideshare.net/smita\\_amin/malaysia-telecommunications-report-q1-2013](http://www.slideshare.net/smita_amin/malaysia-telecommunications-report-q1-2013) Taylor & Francis Group
- Buttle, F. (1996). SERVQUAL: a review, critic, research agenda. *European Journal of Marketing*, 30(1), 8-32
- Byrne, B.M. (2004). Testing for multigroup invariance using AMOS graphics: A road less travelled, structural equation modelling: *A Multidisciplinary Journal*, 11(2), 272-300.
- Byrne, B.M. (2009). Structural equation modelling with AMOS, EQS and Lisrel: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1), 55-86. doi:10.1207/S15327574IJT0101\_4
- Byrne, B.M. (2010). Structural equation Modelling with AMOS. Basic concepts, Applications and Programming, 2<sup>nd</sup> Ed.. New York.
- Caceres, R.C., & Paparoidamis, N.G. (2007). Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836-867. doi:10.1108/03090560710752429
- Carman, J.M. (1990). Consumer perception of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66(1), 33-55
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828
- Caruana, A. (2004). The impact of switching costs on customer loyalty: A study among corporate customers of mobile telephony. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(3), 256-268.
- Celcom is now the No. 1 Telco with 13.1million subscribers, made RM 2.4 billion in 2013. Retrieved November, 10, 2014 from <http://www.malaysianwireless.com>
- Celcom, vision and mission. Retrieved January 6, 2015 from [http://www.celcom.com.my/corporate/aboutus/vision\\_and\\_mission](http://www.celcom.com.my/corporate/aboutus/vision_and_mission)
- Chadha, S.K., & Kapoor, D. (2009). Effect of switching cost, service quality and customer satisfaction on customer loyalty of cellular service providers in Indian market. *The IUP Journal of Marketing Management*, 8(1), 23-37.
- Chandrasekar, K., Zulzaha, F.F., & Lim, Y. (2011, October 23). Saving with alternative texting. " Say no to SMS" trend is fast catching on with WhatsApp, Viber, FB, Skype and BBM users. *The Star*, pp. 3

- Cheah, J., & Chua, F.Y. (2010). Malaysia Telecommunication Services 2010 till 2014: Forecast and analysis. Malaysia Telecommunications: Market analysis, IDC, MY # 3053306S, 1, 1 -47
- Cheah, J. (2011). Malaysia mobile operator competitive analysis. Malaysia telecommunication: competitive analysis, IDC, 1-21. Retrieved January 21, 2012 from <http://www.idc.com>
- Cheah, J., & Chang, L-S. (2011). Malaysia telecommunications services 2011-2015 forecast and analysis. Malaysia telecommunication: market analysis, IDC, 1, 1-44. Retrieved January, 21, 2012 from <http://www.idc.com>
- Cheah, J., & Yang, C. F. (2010). Malaysia telecommunication services 2010-2014 forecast and analysis. Malaysia telecommunication market analysis, IDC, 1, 1-47. Retrieved January 21, 2012 from <http://www.idc.com>
- Chen, I. J., & Popovich, K.(2003). Understanding customer relationship management (CRM). People, process and technology. *Business Process Management Journal*, 9(5), 672-688. doi:10.1108/14637150310496758
- Cheng, T.C.E., Lai, L.C.F., & Yeung, A.C.L. (2008). The driving forces of customer loyalty: A study of internet service providers in Hong Kong. *International Journal of E- Business Research*, 4(4), 26-42
- Cherry, S. (2005). VOIP is turning telephony into just another internet application and a cheap one at that. *IEEE Spectrum*, 53-57
- Chia, S-E., Chia, H-P., & Tan, J-S. (2000). Prevalence of headache among handheld cellular telephone users in Singapore: A Community Study. *Environmental Health Perspectives*, 108(11), 1059-1062
- Chin, W.S. (2014). Mobile telecommunication Revenue 2013. Knowledge sharing session, IDC, 1-31. Retrieved November 9, 2014 from <http://www.idc.com>.
- Choi, C., Kim, C., Sung, N., & Park, Y.(2007). Evaluating the quality of service in mobile business based on Fuzzy Set Theory. *Fourth International Conference on Fuzzy Systems and Knowledge Discovery, Haiku, China*, 1-5
- Chou, P-F., & Lu, C-S. (2009). Assessing service quality, switching costs and customer loyalty in home-delivery services in Taiwan. *Transport Reviews*, 29(6), 741-758. doi:10.1080/01441640902796349
- Chua, F.Y. (2010). Malaysia mobile operator services 2010-2014 forecast and analysis. Malaysian telecommunication: market analysis, IDC, 1, 1-40. Retrieved March 20, 2011 from <http://www.idc.com>
- Churchill, G.A., Jr, C., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), 491-504

- Clark, R.G., & Steel, D.G. (2007). Sampling within household in household surveys. *Journal of The Royal Statistical Society Series A*, 170(1), 63-82
- Coakes, S. J., Steed, L. & Price, J. (2008 ). SPSS version 15.0 for Windows: Analysis without anguish. John Wiley & Sons Australia Ltd
- Colgate, M., & Lang, B. (2001). Switching Barriers in Consumer Markets: An investigation of the Financial Services Industry. *Journal of Consumer Marketing*, 18(1), 332-347.
- Cresswell, J. W. (2008). *Educational Research. Planning, Conducting and Evaluating Quantitative and Qualitative Research*. New Jersey. Pearson.
- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value and customer satisfaction on consumer behavioural intentions in service environments. *Journal of Retailing*, 76(2), 193-218
- Cronin, J. J., Jr., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56(3), 55-68
- Cronin, J. J., Jr., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance- based and perceptions- minus- expectations measurement of service quality. *Journal of Marketing*, 58(1),125-131
- Crosby, L.A., Evans, K.R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing*, 54(3), 68-81
- Danesh, S.N., Nasab, S.A., & Kwek, C.L. (2012). The study of customer satisfaction, trust and switching barriers on customer retention in Malaysian hypermarkets. *International Journal of Business Management*, 7(7), 141-150. doi:10.5539/ijbm.v7n7p141
- Davies, M.A.P., & Prince, M. (2011). Switching cost and ad agency- client relationship longevity: An exploratory study. *Servie Marketing Quarterly*, 32(2), 146-159. doi: 10.1080/15332969.2011.557609
- Day, G.S. (1969). A two- dimensional concept of brand loyalty. *Journal of Advertising Research*, 9(3), 29-35
- Deighton, J., Henderson, C. M., & Neslin, S.A. (1994). The effects of advertising on brand switching and repeat purchase. *Journal of Marketing Research*, 31(1), 28-43
- Demo, G., Neiva, E.R., Nunes, I., & Rozzett, K. (2012). Human Resources Management Policy. *Brazilian Administration Review*, 9(4), 395-420

- Deng, Z., Lu, Y., Wei, K.K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Information Management*, 30, 289-300. doi:10.1016/j.ijin.fomgt.2009.10.001
- Department of Statistics Malaysia. Population distribution and basic demographic characteristics report 2010. Retrieved September, 2, 2012 from <http://www.statistics.gov.my>
- Deutsch, M. (1958 ). Trust and suspicion. *The Journal of Conflict Resolution*, 2(4), 265-279
- Dhaliwal, R.K., & Joshi, V. (2010). Mobile phones- Boon to rural social system. *Literacy Information and Computer Education Journal*, 1(4), 261-265
- Dick, A. S., & Basu, K. (1994). Customer Loyalty: Toward an Integrated Conceptual Framework. *Journal of The Academy of Marketing Science*, 22(2), 99-113
- Digi Annual Report 2013. Retrieved November, 10, 2014 from <http://www.digi.com.my>
- Doney, P.M., & Cannon, J.P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61, 35-51
- Dowling, G.R., & Staelin, R. (1994). A Model of Perceived Risk and Intended Risk Handling Activity. *Journal of Consumer Research*, 21(1), 119-134.
- Dwyer, R., Schurr, P., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51, 11-27.
- Eakaru, N. (2010). *The direct and indirect effect of antecedent variables on customer loyalty toward commercial bank in southern Thailand*. Unpublished Doctoral Thesis, Universiti Utara Malaysia.
- East, R., Gendall, P., Hammond, K., & Lomax, W. (2005). Customer loyalty: Singular, Additive or Interactive. *Australasian Marketing Journal*, 13(2), 10-26
- Edward, M., & Sahadev, S. (2011). Role of switching cost in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327-345. doi: 10.1108/13555851111143240
- Edward, M., & Sahadev, S. (2013). Modelling the consequences of customer confusion in a service marketing context: An Empirical Study. *Journal of Services Research*, 12(2), 1-20
- Ennew, C.T., & Binks, M. R. (1996). The impact of service quality and service characteristics on customer retention: small businesses and their banks in the UK. *British Journal of Management*, 7, 219-230



- Eriksson, E. (2008). *A case study about cell phone use by people in rural Kenya*. Unpublished Thesis, Vaxjo University
- Farrell, A.M., & Rudd, J.M. (2009). Factor analysis and discriminant validity: A brief review of some practical issue. *Anzmac*, 1-9.
- Feick, L., Lee, J., & Lee, J. (2001). The impact of switching costs on the customer satisfaction – loyalty link: mobile phone service in France. *Journal of Services Marketing*, 15(1), 35-48
- Fisher, A. (2001). Practice papers: Winning the battle for customers. *Journal of Financial Services Marketing*, 6(1), 77-83
- Frazer, K., Glacken, M., Couhlan, B., Staines, A., & Daly, L. (2011). Hepatitis C virus in primary care: survey of nurses' attitudes to caring. *Journal of Advanced Nursing*, 67(3), 598-608
- Fullerton, G. (2005). How commitment both enables and undermines marketing relationship. *European Journal of Marketing*, 39(11/12), 1372-1388.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6-21
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50
- Galperin, H., & Mariscal, J. (2007). Mobile opportunities: Poverty and telephony access in Latin America and Carribean. *Proceeding of the DIRSI Research*, 1-21
- Gan, J., & Ganguli, S. (2003). Effects of global trade liberalization on US forest product industries and trade: a computable general equilibrium analysis. *Forest Products Journal*, 53(4), 29-35
- Garbarino, E., & Johnson, M.S. (1999). The different roles of satisfaction, trust and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-87
- Garland, R., & Gendall, P. (2004). Testing Dick and Basu's customer loyalty model. *Australasian Marketing Journal*, 12(3), 81-87
- Gefen, D., Karahanna, E., & Straub, D.W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90
- Gerpott, T.J., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. *Telecommunication Policy*, 25, 249-269
- Ghazali, E., Arnott, D. & Mutum, D. (2011). Conceptualising and measuring online switching costs. *European Advances in Consumer Research*, 9, 151-157

- Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. *Psychological Bulletin*, 68, 104-120
- Gomez, J., & Maicas, J.P. (2011). Do switching cost mediate the relationship between entry timing and performance? *Strategic Management Journal*, 32, 1251-1269. doi:10.1002/smj.931
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178.
- Graf, R., Durif, F. & Belzile, M. (2008). Echo generation : switching costs and relational approach in the banking industry. *Innovative Marketing*, 4(1), 77-86.
- Gremler, D.D. (1995). The effect of satisfaction, switching costs and interpersonal bonds on service loyalty. Unpublished doctoral dissertation, Arizona State University, Tucson, Arizona.
- Gremler, D.D., & Brown, S.W. (1996). Service loyalty: it's nature, importance and implications. *International Service Quality Association*, 171-80
- Gronroos, C. (2001). The perceived service quality concept- a mistake? *Managing Service Quality*, 11(3), 150-152
- Gundlach, G.T., & Murphy, P.E. (1993). Ethical and legal foundations of relational marketing exchanges. *Journal of Marketing*, 57, 35-46
- Ha, J., Karande, K., & Singhapakdi, A. (2004). Importers' relationship with exporters: Does culture matters. *International Marketing Review*, 21 (4/5), 447-461. doi:10.1108/02651330410547135
- Habib, F.Q., Salleh, M. A. H., & Abdullah, N. L. (2011, July). Service switching among mobile phone users. *The 2<sup>nd</sup> International Research Symposium in Service Management*. Yogyakarta, Indonesia
- Hafeez, S., & Hasnu, S. (2010). Customer satisfaction for cellular phones in Pakistan: A case study of Mobilink. *Business and Economics Research Journal*, 1(3), 35-44
- Hair, J. F. Jr., Black, W.C., Babin, B.J., & Anderson, R. E. (2010). *Multivariate Data Analysis. A Global Perspective*. 7<sup>th</sup> Ed, Pearson.
- Hair, J. F., Black, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*. Prentice Hall.
- Hair, J. F. Jr., Money, A. H., Samouel, P., & Page, M. (2007). *Research methods for business*. John Wiley & Sons Ltd, England.

- Hamidizadeh, M.R., Jazani, N., Hajikarimi, A., & Ebrahimi, A. (2011). A model for explanation of customer satisfaction consequences in Banking industry: Evidence from Iran. *International Business and Management*, 3(1), 141-147. doi: 10.3968/j.ibm.1923842820110301.102
- Han, H., & Hwang, J. (2014). In-flight physical surroundings: quality, satisfaction and traveler loyalty in the emerging low-cost flight market. *Current issues in Tourism*, 1-19. doi:10.1080/13683500.2014.960371
- Han, X., Kwortnik, R. J., Jr., & Wang, C. (2008). Service loyalty: An Integrative model and examination across service contexts. *Journal of Service Research*, 11(22), 22-42. doi:10.1177/1094670508319094
- Harris, L. C., & Goode, M. H. H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing*, 80, 139-158. doi:10.1016/j.jretai.2004.04.002
- Harvir S. Bansal., & P. Gregory Irving (2004). A Three-Component Model of Customer Commitment to Service Providers. *Journal of the Academy of Marketing Science*, 32.
- Hashim, M. (2006). Learning and Development Division, Telekom Malaysia.
- Hauser, J. R., & Wernerfelt, B. (1990). An evaluation cost model of consideration sets. *Journal of Consumer Research*, 16, 393-408.
- Hayes, A.F. (2009). Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*, 76(4), 408-420. doi:10.1108/03637750903310360
- Hellier, P. K., Guersen, G. M., Carr, R. A., & Rickard, J. A. (2002). Customer repurchase intention. A general structural equation model. *European Journal of Marketing*, 37(11/12), 1762-800
- Hobbs, T. (2010). Looking for a Grandview: introducing concepts of robust sampling to policymakers and practitioners engaged in measuring the well-being of children at the local authority level. *International Journal of Social Research Methodology*, 13(5), 383-393. doi:10.1080/13645570903354294
- Hobfeld, T., & Binzenhofer, A. (2008). Analysis of Skype Voip traffic in UMTS: end to end QOS and QOE measurements. *Computer Networks*, 52, 650-666. doi:10.1016/j.comnet.2007.10.008
- Hoe, J. & Hoare, Z. (2012). Understanding Quantitative Research: Part 1. Nursing Standards/ *RCN Publishing*, 27, 15-17.
- Holcombe, A. (2002). The self-service approach to churn reduction. *Telecommunication International*, 34-36

- Homburg, C., Giering, A., & Menon, A. (2003). Relationship characteristics as the moderators of satisfaction-loyalty link: Findings in a Business-to-Business Context. *Journal of Business-to-Business Marketing*, 10(3), 35-62
- Hooper, D., Coughlan, J., & Mullen, M.R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6(1), 53-60
- Hsu- J., S.- C. (2014). Understanding the role of satisfaction in the formation of perceived switching value. *Decision Support System*, 59, 152-162. doi:10.1016/j.dss.2013.11.003
- Hu, A. W. L., & Hwang, I. S. (2006). Measuring the effects of consumer switching costs on switching intention in taiwan mobile telecommunication services. *The Journal of American Academy of Business*, 9(1), 75-85
- Hughes, A.M. (2007). Churn reduction in telecom industry. Retrieved on September 1, 2009, from [www.dbmarketing.com/telecom/churn reduction](http://www.dbmarketing.com/telecom/churn%20reduction)
- Iacobucci, D., & Ostrom, A. (1996). Commercial and Interpersonal Relationships; Using the structure of interpersonal relationships to understand individual-to-individual, individual-to-firm, and firm-to-firm relationships in commerce. *International Journal of Research in Marketing*, 13, 53-72
- Ibanez, V.A., Hartmann, P., & Calvo, P.Z. (2006). Antecedents of customer loyalty in residential energy market: Service quality, satisfaction, trust and switching cost. *The Service Industries Journal*, 26(6), 633-650. doi: 10.1080/02642060600850717
- International telecommunication Union (2014). ICT facts and figures. Retrieved April 20, 2014, from <http://www.itu.int/ITU-D/ict/facts/2013/material/ictfactsfigures2011.pdf>
- Ishaq, M.I. (2012). Perceived value, service quality, corporate image and customer loyalty: Empirical assessment from Pakistan. *Serbian Journal of Management* 7(1), 25-36. doi:10.5937/sjm12010251
- Infocomm Development Authority of Singapore (2014). Mobile phone penetration 2002 – 2013. Annual. Retrieved on November 10, 2014 from <http://www.ida.gov.sg>.
- Islam, M. S. (2010). The analysis of customer loyalty in Bangladeshi Mobile Phone Industry. *World Journal of Management*, 2(2), 130-145
- Izogo, E.E., & Ogba, I-E. (2015). Service quality, customer satisfaction and loyalty in automobile repair services sector. *International Journal of Quality and Reliability Management*, 32(3), 1-17. doi: 10.1108/IJQRM-05-2013-0075
- Jacoby, J. (1971). A model of multi-brand loyalty. *Journal of Advertising Research*, 11(3), 25-31

- Jacoby, J., & Kyner, D.B. (1973). Brand loyalty vs. repeat purchase behaviour. *Journal of Marketing Research*, 10(1), 1-9
- Johnson, M.D., Gustafsson, A., Andreassen, T.W., Lervik, L., & Cha, J. (2001). The evolution and future of national customer satisfaction index models. *Journal of Economic Psychology*, 22, 217-245
- Johnson, M.D., Herrmann, A., & Huber, F. (2006). The Evolution of Marketing Intentions. *Journal of Marketing*, 70, 122-132
- Johnson, W.C., & Sirikit, A. (2002). Service quality in the Thai telecommunication industry: A tool for achieving a sustainable competitive advantage. *Management Decision*, 40(7), 693-701
- Jomo, K.S., & Tan, W.S. ( n.d. ). Privatization and re- nationalization in Malaysia: A Survey. Retrieved May 10, 2011 from, <http://www.jomoks.org/research/research.htm>.
- Jones, M.A., Mothersbaugh, D.L., & Beatty, S.E. (2002). Why customers stay; measuring the underlying dimensions of services switching costs and managing their differential strategic outcomes. *Journal of Business Research*, 55, 441-450.
- Jones, H., & Farquhar, J.D. (2003). Contact Management and Customer Loyalty, *Journal of Financial Services Marketing*, 8(1), 71-78
- Jones, M. A., Reynolds, K. E., Mothersbaugh, D. L., & Beatty, S. E. (2007). The positive and negative effects of switching costs on relational outcomes. *Journal of Service Research*, 9(4), 335-355. doi:10.1177/1094670507299382
- Jones, T.O., & Sasser, JR, W.E. (1995). Why satisfied customers defect. *Harvard Business Review*, 1-14
- Kalba, K. (2007). The adoption of mobile phones in emerging markets: global diffusion and the rural challenge. 6<sup>th</sup> Annual global Mobility Roundtable, 1-22.
- Karine, E. M., Frank, L., & Laine, K. (2004). Effect of price on the diffusion of cellular subscription in Finland. *Journal of Product & Brand Management*, 13(3), 192-199. doi:10.1108/10610420410538087
- Kaur, H & Soch, H. (2012). Validating antecedents of customer loyalty for Indian cellphone users. *The Journal for Decision Makers*, 37(4), 47-61.
- Khan, A.S., & Manthiri, A.A. (2012). Quality of service in mobile phone industry in Madurai district. *Arabian Journal of Business and Management Review*, 1(9), 60-76
- Khan, M.A. (2010). An empirical assessment of service quality of cellular mobile telephone operators in Pakistan. *Asian Social Sciences*, 6(10), 164-177

- Khatibi, A.A., Ismail, H., & Thyagarajan, V. (2002). What drives customer loyalty: An analysis from the telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing*, 11(1), 34-44
- Kheng, L.L., Mahamad, O., Ramayah, T., & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of Banks in Penang, Malaysia. *International Journal of Marketing Studies*, 2(2), 57-66.
- Khoo, D. (2012, October 29). Telcos expected to keep growing despite high mobile-phone penetration rate. *The Star*. Retrieved April 20, 2013 from <http://biz.thestar.com.my>
- Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunication policy* 28, 145-159. doi:10.1016/j.telpol.2003.12.003
- Kim, C., Zhao, W., & Yang, K.H. (2008). An empirical study on the integrated framework of e-CRM in online shopping: Evaluating the relationships among perceived value, satisfaction and trust based on customers' perspectives. *Journal of Electronic Commerce in Organizations*, 6(3), 1-19
- Kim, J., Morris, J.D., & Swait, J. (2008). Antecedents of true brand loyalty. *Journal of Advertising*, 37(2), 99-117
- Klemper, P. (1987). Entry deterrence in markets with consumer switching costs. *The Economic Journal*, 97, 99-117
- Klemper, P. (1995). Competition when consumers have switching costs: An overview with applications to Industrial organization, Macroeconomics, and International trade. *Review of Economic Studies*, 62, 515-539
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610
- Kruse, J. (2008). Network neutrality and quality of service. *Intereconomics*, 25-30. doi: 10.1007/s10272-008-0242-02
- Kumar, A., & Lim, H. (2008). Age differences in mobile service perceptions: comparison of generation Y and baby boomers. *Journal of Services Marketing*, 22(7), 568-577. doi:10.1108/08876040810909695
- Kumar, D. (2010). Voice Market Trends in Malaysia. *Growth & Consulting Practice, Frost & Sullivan Asia Pacific*, Retrieved on March 12, 2012 from <http://www.frost.com>.
- Kumar, S. (2004). Mobile communications; global trends in the 21<sup>st</sup> century. *International Journal Mobile Communication*, 2(1), 67-86

- Kuusik, A., & Varblane, U. (2009). How to avoid customers leaving: the case of the Estonian telecommunication industry. *Baltic Journal of Management*, 4(1), 66-79. doi:10.1108/17465260910930458
- Ladhari, R., Souiden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction and image. *Journal of Financial Services Marketing*, 16(2), 111-124
- Lai, F., Hutchinson, J., Li, D., & Bai, C. (2005). An empirical assessment and application of SERVQUAL in mainland China's mobile communications industry. *International Journal of Quality and Reliability Management*, 24(3), 244-262. doi:10.1108/02656710710730852
- Lau, G., & Lee, S.H. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market Focused Management*, 4(4), 341-370
- Lee, G-Y., Chu, P-Y. & Chao, Y. (2011). Service quality, relationship quality and customer loyalty in Taiwanese Internet Banks. *Social Behaviour and Personality*, 39(8), 1127-1140. doi:10.2224/sbp.2011.39.8.1127
- Lee, H-M., & Chen, T. (2014). Perceived quality as a key antecedent in continuance intention on mobile commerce. *International Journal of Electronic Commerce Studies*, 5(2), 123-142. doi:10.7903/ijecs.1150
- Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction – loyalty link: Mobile phone service in France. *Journal of Services Marketing*, 15(1), 35-48.
- Lee-Kelly, L., Gilbert, D., & Mannicom, R. (2003). How e-CRM can enhance loyalty. *Market Intelligence and Planning*, 21(4), 239-248. doi:10.1108/02634500310480121
- Lee, M., & Cunningham, L. F. (2001). A cost/benefit approach to understanding service loyalty. *Journal of Services Marketing*, 15(2), 113-130. doi:10.1108/08876040110381463
- Lee, P. (2013, February 10). MCMC confident of hitting smartphone target. *The Star*, pp. 18.
- Lee, R., & Murphy, J. (2008). The moderating influence of enjoyment on customer loyalty. *Australasian Marketing Journal*, 16(2), 11-21
- Lee, R., Murphy, J. & Dickinger, A. (2006). Investigating the loyalty of prepaid and postpaid mobile customers. Paper presented at *International Conference on Business and Information, Singapore*. Retrieved from <https://intranet.modul.ac.at/node/518>
- Lenhart, A., Ling, R., & Purcell, K. (2010). Teens and mobile phones. Pew Research Center's Internet and American Life project. Retrieved April, 15, 2013 from <http://pewinternet.org/Reports/2010/Teens-and-mobile-phones.aspx>

- Li, M-L., & Green, R. D. (2011). The mediating influence on customer loyalty: The role of perceived value. *Journal of Management and Marketing Research*, 7, 1-12.
- Liaw, G-F., & Liang, S-H. (2013). The effect of trust, satisfaction and switching cost on customers' loyalty.- A model of on-line auction. *The Journal of International Management Studies*, 8(1), 59-67.
- Lien-Ti Bei. (2006). The Determinants of customer loyalty: An analysis of intangible factors in three service industry. *International Journal of Commerce & Management*, 16(3&4), 162-177
- Liu, C-T., Guo, Y.M., & Lee, C-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, 31, 71-79. doi: 10.1016/j.ijinfomgt.2010.05.008
- Liu, A.H. (2006). Customer value and switching costs in business services: Developing exit barriers through strategic value management. *Journal of Business & Industrial Marketing*, 21(1), 30-37
- Lu, H-Y., Hou, H-Y., Dzwo, T-H., Wu, Y-C., Andrews, J.E., Weng, S-T., lin, M-C., & Lu, J-Y. (2010). Factors influencing intentions to take precautions to avoid consuming food containing dairy products. Expanding the theory of planned behaviour. *British Food Journal*, 112(9), 919-933
- Ma, Y.J., & Niehm, L.S. (2006). Service expectation of older generation Y customers: An examination of apparel retail settings. *Managing Service Quality*, 16(6), 620-640. doi:10.1108/09604520610711936
- Macintosh, G., & Lockshin, L.S. (1997). Retail relationship and store loyalty: A multi-level perspective. *International Journal of Research in Marketing*, 14, 487-497
- Mackinnon, D.P., Coxe, S., & Baraldi, A.N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business Psychology*, 27, 1-14. doi:10.1007/s10869-011-9248-z
- Mahalakshmi, V. & Saravanaraj, M. G. (2011). An empirical study on customers' satisfaction towards banking services in Trichy. *Interdisciplinary Journal of Contemporary Research in Business*, 3(4), 237-253
- Malaysian Communication and Multimedia Commission (2014). Communication and Multimedia pocket book of statistics Q1 2014. Retrieved November 10, 2014 from <http://www.skmm.gov.my>
- Malaysian Communication and Multimedia Commission (2008). Selected Facts and Figures. Retrieved April 3, 2009 from <http://www.skmm.gov.my>.



- Malaysian Communication and Multimedia Commission (2009). Statistical Brief number Nine, Hand phone User Survey 2009. Retrieved August 7, 2010 from [http://www.skmm.gov.my/files/attachment/HPUS 2009](http://www.skmm.gov.my/files/attachment/HPUS%2009)
- Malik, M. E., Naeem, B., & Arif, Z. (2011). Impact of perceived service quality on banking customers' loyalty. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 637-645
- Mariscal, J., (2009). Market structure and penetration in the Latin American mobile sector. *Emerald Group Publishing Limited*, 11(2), 24-41. doi:10.1108/14636690910941867
- Martin, C.A. (2005). From high maintenance to high productivity: What managers need to know about Generation Y. *Industrial and Commercial Training*, 37(1), 39-44. doi:10.1108/00197850510699965
- Matos, C.A., Henrique, J.L., & Rosa, F.D. (2013). Customer reactions to service failure and recovery in the banking: the influence of switching costs. *Journal of Services Marketing*, 27(7), 526-538. doi:10.1108/JSM-01-2012-0019
- Matzler, K., Strobl, A., Thurner, N., & Fuller, J. (2015). Switching experience, customer satisfaction and switching costs in the ICT industry. *Journal of Service Management*, 26(1), 1-33. doi:10.1108/JOSM-04-2014-0101
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3),709-734.
- McClung, M., & Gayle, V. (2010). Exploring the care effects of multiple factors on the educational achievement of children looked after at home and away from home; an investigation of two Scottish local authorities. *Child and Family Social Work*,15, 409- 431. doi:10.1111/j.1365-2206.2010.00688.x
- McGowan, W.G. (1976). How MCI will serve the nations communication users. *Hagley Digital Archives*. Retrieved 12 June 2009, from <http://digital.hagley.org/cdm/compoundobject/collection>.
- Meng, J. & Elliott, K.M. (2009). Investigating structural relationships between service quality, switching costs and customer satisfaction. *Journal of Applied Business and Economics*,
- Meng, J., & Elliott, K.M. (2009). Service quality dimensions: Antecedents of consumer switching costs in customer relationships. *International Journal of Business Strategy*, 9(2), 128-135
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the Workplace: Toward a General Model. *Human Resource Management Review*, 11, 299-326.
- Ministry of Education Malaysia (2012). Retrieved on November 27, 2014 from <http://www.moe.gov.my/en/dasar-pendidikan-kebangsaan>.

- Mislevy, R.J. (1986). Recent developments in the factor analysis of categorical variables. *Journal of Educational Statistics*, 11(1), 3-31
- Moffet, S., & McAdam, R. (2009). Knowledge management: a factor analysis of sector effects. *Journal of Knowledge Management*, 13(3), 44-59. doi:10.1108/13673270910962860
- Mokhtar, S.S.M., Maiyaki, A.A., & Mohd Nor, N. (2011). The relationship between service quality and satisfaction on customer loyalty in Malaysian mobile communication industry. *European Union Journal*, 32-38
- Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, 57(1), 81-101
- Moffett, S., & McAdam, R. (2009). Knowledge Management: a factor analysis of sector effects. *Journal of Knowledge Management*, 13(3), 44-59. doi:10.1108/13673270910962860
- Mohd, Z., & Azleen, I. (2011). Seven unique differentiation to strategies to online businesses. A comprehensive review of Malaysian Airline System (MAS). *Journal of Internet Banking and Commerce*, 16(2), 1-16.
- Morgan, R.M., & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20-38
- Morosan, C. (2014). Toward an integrated model of adoption of mobile phones for purchasing ancillary services in air travel. *Journal of Contemporary Hospitality Management*, 26(2), 246-271. doi: 10.1108/IJCHM-11-2012-0221
- Munnukka, J. (2005). Dynamics of pricing sensitivity among mobile service customers. *The Journal of Product and Brand Management*, 14(1), 65-73
- Murray, K.B. (1991). A test of services marketing theory: Consumer information acquisition activities. *Journal of Marketing*, 55, 10-25
- Namin, T., & Tabataba'i. (2012). The role of attitudes and decision making on product choice. Case study: cellular phone. *International Business Research*, 5(5), 132-146. doi:10.5539/ibr.v5n5p132
- Narayandas, N.(1996). The link between customer satisfaction and customer loyalty: An empirical investigation, *Working paper, No 97-017, Harvard Business School*, Boston, MA.
- Nei, L., Azarian, M.H., Keimasi, M., Pecht, M. (2007). Prognostic of ceramic capacitor temperature-humidity-bias reliability using Mahalanobis distance analysis. *Circuit world*, 33(3), 21-28. doi:10.1108/03056120710776988
- Neuman, W.L. (2009). Understanding research. Pearson Education International.

- Nooteboom, B. (1996). Trust, opportunism and governance: A process and control model. *Organization Studies*, 17(6), 985-1010.
- Norbayah, M.S., & Norazah, M.S. (2007). Mobile phone usage for m-learning: comparing heavy and light mobile phone users. *Campus-Wide Information Systems*, 24(5), 355-365. Doi: 10.1108/10650740710835779
- Odin, Y., Odin, N., & Valette- Florence, P. (2001). Conceptual and operational aspects of brand loyalty: An empirical investigation. *Journal of Business Research*, 53, 75-84
- Ognitvsev, V. (2005). Economic liberalization as a driving force of globalization: Experiences of countries in North and Central Asia. *United Nation Conference on Trade and Development, trade analysis branch, Moscow*. Retrieved on June 21, 2011, from [http://www.unescap.org/tid/projects/globalize\\_wgvictor.pdf](http://www.unescap.org/tid/projects/globalize_wgvictor.pdf)
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469
- Oliver, R. L. (1999). Whence Customer loyalty? *Journal of Marketing*, 63(special issue), 33-44
- Oliver, R. L. (2010). Satisfaction: A Behavioral Perspective on the Consumer, New York: M.E. Sharpe, Inc
- Oyeniya, J.O., & Abiodun, J.A. (2010). Switching cost and customers loyalty in the mobile phone market: The Nigerian experience. *Business Intelligence Journal*, 3(1), 111-121
- Pantouvakis, A., & Lymperopoulos, K. (2008). Customer satisfaction and loyalty in the eyes of new and repeat customers; evidence from the transport sector. *Managing Service Quality*, 18(6), 623-643. doi:10.1108/09604520810920103
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implication for future research. *Journal of Marketing*, 49(4), 41-50
- Parasuraman, A., Zeithaml, V. A., & Berry L. L. (1988). SERVQUAL: a multiple item scale for measuring customer perception of service quality. *Journal of Retailing*, 64, 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. *Journal of Marketing*, 51(1), 111-124
- Park, J-G., Park, K., & Lee, J. (2014). A firm's post-adoption behavior: loyalty or switching costs? *Industrial Management and Data Systems*, 114(2), 258-275. doi:10.1108/IMDS-06-2013-0259

- Pearson, A., Tadisina, S., & Griffin, C. (2012). The role of e- service quality and information quality in creating perceived value: Antecedents to website loyalty. *Information Systems management*, 29, 201-215. doi: 10.1080/10580530.2012.687311.
- Phillips, D. M., & Baumgartner, H. (2002). The role of consumption emotions in the satisfaction response. *Journal of Consumer Psychology*, 12(3), 243-52
- Porter, M. (1998). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, The Free Press, New York, NY.
- Picon, A., Castro, I., & Roldan, J.L. (2014). The relationship between satisfaction and loyalty: A mediator analysis. *Journal of Business Research*, 67, 746-751. doi:10.1016/j.jbusres.2013.11.038
- Pleshko, L.P., & Heiens, R.A. (2015). Customer satisfaction and loyalty in the Kuwait retail services market: why are satisfied buyers not always loyal buyers? *The International review of Retail, Distribution and Consumer Research*, 25(1), 55-71. doi: 10.1080/09593969.2014.880936
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation model. *Behavior Research Methods, Instruments and Computers*, 36(4), 717-731.
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategy for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. doi:10.3758/BRM.40.3.879
- Preacher, K.J., & Selig, J.P. (2012). Advantages of Monte Carlo Confidence Intervals for Indirect effects. *Communication Methods and Measures*, 6, 77-98. Doi:10.1080/19312458.2012.679848
- Prichard, M. P., Havitz, M. E., & Howard, D. R. (1999). Analyzing the commitment-loyalty link in service contexts. *Journal of the Academy of Marketing Science*, 27(3), 333- 348
- Purkayastha, D. (2004). Theory of Reciprocal Gifts. *Atlantic Economic Journal*, 32(4), 312-319
- Rahman, M.S.(2012). An exploratory study on female employees' perception toward work environment.: Structural equation modelling approach. *International Journal of Business Studies*, 20(1), 69-90
- Rahman, S., & Azhar, S. (2011). Xpressions of generation Y: perceptions of the mobile phone service industry in Pakistan. *Asia Pacific Journal of Marketing and logistics*, 23(1), 91-107. doi:10.1108/13555851111100012
- Rahman, Z. (2006). Superior Service Quality in Indian Cellular Telecommunication Industry: A source of sustainable competitive advantage in an emerging

economy. *Services Marketing Quarterly*, 27(4), 115-139.  
doi:10.1300/J396v27n04\_07

- Ranawera, C., & Neely, A. (2003). Some moderating effects on the service quality-customer retention link. *International Journal of Operations and Production Management*, 23(2), 230-248. Doi:10.1108/01443570310458474
- Ranjbarian, B., Sanayei, A., Kaboli, M.R., & Hadadian, A. (2012). An analysis of brand image, perceived quality, customer satisfaction and re-purchase intention in Iranian Department Store. *International Journal of Business and Management*, 7(6), 40-48. doi:10.5539/ijbm.v7n6p40
- Rauyruen, P., Miller, K. E., & Barrett, N.J. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60(1), 21-31
- Reichheld, F. F., & Sasser, W. E. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 519(10), 1-9.
- Reichheld, F.F., & Schefter, P. (2000). E-loyalty: Your secret weapon on the web. *Harvard Business Review*, 105-113
- Reinartz, W.J., & Kumar, V. (2000). On the profitability of long-life customers in a non-contractual setting: an empirical phase and implications for marketing. *Journal of Marketing*, 64(4), 17-35
- Reinke, T. H. (1998). Local number portability and local loop competition. Critical issues. *Telecommunication Policy*, 22(1), 73-87
- Reynolds, K.E., & Arnold, M.J. (2000). Customer loyalty to the salesperson and the store: Examining relationship customers in an upscale retail context. *Journal of Personal Selling and Sales Management*, 20(2), 89-98
- Rigby, D. K., Reichheld, F., & Dawson, C. (2003). Winning customer loyalty is the key to a winning CRM strategy. *Ivy Business Journal*, 1-5.
- Roest, H. & Pieters, R. (1997). The nomological net of perceived service quality. *International Journal of Service Industry Management*, 8(4), 336-51.
- Rosenbaum, M.S., & Spears, D. (2009). Using group comparisons in AMOS to explore shopping as a travel driver. *International Journal of Culture, Tourism and Hospitality Research*, 3(4), 313-325. doi:10.1108/17506180910994532
- Roy, S.K., Eshghi, A., & Quazi, A. (2014). Consumer's advocacy impact on satisfaction and loyalty. *Journal of Services Research*, 14(1), 161-182.
- Rowley, J. (2005). The four Cs of customer loyalty. *Market Intelligent and Planning*, 23(6), 574-581. doi:10.1108/02634500510624138

- Ruiz-Mafe, C., Marti-Parreno, J., & Sanz-Blas, S. (2014). Key drivers of consumer loyalty to Facebook fan pages. *Online Information Review*, 38(3), 362-380. doi: 10.1108/OIR-05-2013-0101
- Rundle-Thiele, S. (2005). Exploring loyal qualities: assessing survey- based loyalty measures. *Journal of Services Marketing*, 19(6/7), 492-500. doi:10.1108/08876040510625990
- Ruyter, K.D., Wetzels, M., & Bloemer, J. (1998). On the relationship between perceived service quality, service loyalty and switching costs. *International Journal of Service Industry Management*, 9(5), 436-453. doi:10.1108/09564239810238848
- Ruzindana, A (2013). Neglect of education and agriculture is a disaster. Retrieved on April 3, 2013 from [www.monitor.co.ug/Oped/Opedcolumnis/AugustineRuzindana](http://www.monitor.co.ug/Oped/Opedcolumnis/AugustineRuzindana)
- Sager, E. (1976). Operational definition. *Journal of Business Communication*, 14(1), 23-26
- Santouridis, I., & Trivellas, P.(2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330-343. doi:10.1108/17542731011035550
- Sathish, M., Kumar, K.S., Naveen, K.J. & Jeevanantham, V. (2011). A study on consumer switching behaviour in cellular service provider. A study with reference to Chennai. *Far East Journal of Psychology and Business*, 2(2), 71-81
- Schiffman, L., & Kanouk, L. (2000). Consumer behavior, 7<sup>th</sup> Ed, Prentice - Hall, Engelwood Cliffs, NJ
- Schlenker, B.R., Helm, B., & Tedeschi, J.T. (1973). The effects of personality and situational variables on behavioral trust. *Journal of Personality and Social Psychology* , 25(3), 419-427.
- Sekaran, U. (2003). Research Method for Business. A Skill Building Approach. New York. Wiley.
- Seth, A., Momaya, K. & Gupta, H.M. (2005). An exploratory investigation of customer loyalty and retention in cellular mobile communication. *Journal of Services Research, Special Issues*, 173-185
- Shankar, V., Smith, A.K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153- 175. doi:10.1016/S0167-8116(03)00016-8
- Shi, M., Chiang, J., & Rhee, B. D (2006). Price Competition with Reduced Consumer Switching Cost: The Case of “Wireless Number Portability” in the Cellular Phone Industry. *Management Science*, 52(1), 27-38

- Shi, W-H., Chen, J-.J., & Ma, J-M. (2011). A study on customer loyalty based on switching cost and brand attachment. *The Journal of China Universities of posts and telecommunication*, 18(1), 136-141. doi:10.1016/S1005-8885(10)60195-1
- Shin, D.H., & Kim, W.Y. (2007). Mobile number portability on customer switching behaviour: in the case of Korean mobile market. *Emerald group publishing limited*. 9(4), 38-54. doi:10.1108/14636690710762129
- Shrivastava, M. & Israel, D. (2010). Predicting select mobile service preference based on demographic profile of mobile users in Oman. *IJMM*, 5(1), 98-112
- Siri, J.G., Lindblade, K.A., Rosen, D.H., Onyango, B., Vulule, J.M., Slutsker, L., & Wilson, M.L. (2008). A census – weighted, spatially- stratified household sampling strategy for urban malaria epidemiology. *Malaria Journal*, 7(39), 1-10. doi:10.1186/1475-2875-7-39
- Sivadass, E., & Prewitt, J.L.B. (2000). An examination of the relationship between service quality, customer satisfaction and store loyalty. *International Journal of Retail and Distribution Management*, 28(2), 73-82
- Socialbakers (n.d.). Malaysia facebook statistics. Retrieved April 20, 2013, from <http://www.socialbakers.com/facebook-statistics/malaysia>
- Srinuan, P., Annafari, M.T., & Bohlin, E. (2011). An analysis of switching behaviour in the Thai cellular market. Emerald Group Publishing Limited, 13(4), 61-74. doi: 10.1108/14636691111146154
- Stan, V., Caemmerer, B., & Cattan-Jallet, R. (2013). *The Journal of Applied Business Research*, 29(5), 1541-1554
- Sujatha, P., & Chandrika, N. (2013). Switching costs, customer satisfaction and brand loyalty: An empirical study on Airtel cellular services in Chittor district. *Sumedha Journal of Management*, 12(4), 83-95
- Sumaedi, S., Mahatma, Bakti, I.G.M.Y., Rakhmawati, T., Astrini, N.J., Widiarti, T., & Yarmen, M. (2014). Clinical Governance: *An International Journal*, 19(3), 269-283. doi: 10.1108/CGIJ-04-2014-0018
- Sutanto, J.E., & Minantyo, H. (2014). The influence service quality, product quality and customer satisfaction toward customer loyalty at modern ritel in East Jawa. *International Journal of Academic Research*, 6(5), 299-304. doi: 10.7813/2075-4124.2014/6-5/A.41
- Talaja, A. (2012). Using multiple group structural model for testing differences in absorptive and innovative capabilities between large and medium sized firms. *Croatian operational Research Review*, 3, 321-331

- Tarkiainen, A. & Sundqvist, S. (2005). Subjective norms, attitude and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107 (11), 808 -822
- Tarus, D.K., & Rabach, N. (2013). Determinants of customer loyalty in Kenya: does corporate image play a moderating role? *The TQM Journal*, 25(5), 473-491. doi:10.1108/TQM-11-2012-0102
- Telegeography (2008). Turkey gets MNP at last. Retrieved on December, 20, 2012, from [www.telegeography.com](http://www.telegeography.com)
- Teo, R. (2012). Telco industry remains highly competitive. Retrieved on November 09, 2012, from [www.theborneopost.com](http://www.theborneopost.com)
- Thomas, J.S., Blattberg, R.C., & Fox, E.J. (2004). Recapturing lost customers. *Journal of Marketing Research*, 41(2), 31-45
- Teas, R.K. (1994). Expectations as a comparison standard in measuring service quality: An assessment of a reassessment. *Journal of Marketing*, 58(1), 132-139
- Tong, C., Wong, S. K-S., & Lui, K. P-H. (2012). The influences of service personalization, customer satisfaction and switching costs on e-loyalty. *International Journal of Economics and Finance*, 4(3), 105-114 doi:10.5539/ijef.v4n3p105
- Tsai, M-T., & Tsai, C-L. (2010). The effect of customer value, customer satisfaction and switching costs on customer loyalty: An empirical study of hypermarket in Taiwan. *Social Behavior and Personality*, 38(6), 729-740. doi: 10.5539/ijef.v4n3p105
- Tu, Y-T., Li, M-L., & Chih, H-C. (2011). The effect of service quality, customer perceived value and satisfaction on loyalty. *Journal of Economics and Behavioural Studies*, 3(3), 198-212.
- Uncles, M. D., Dowling, G. R., & Hammond, K. (2003). Customer loyalty and customer loyalty programs. *Journal of Consumer Marketing*, 20(4), 294-316. doi:10.1108/07363760310483676
- Valenzuela, L.M., Mulki, J.P., & Jaramillo, J.F. (2009). Impact of customer orientation, inducements and ethics on loyalty to the firm: Customers' perspective. *Journal of Business Ethics*, 93, 277-291
- Van der Wal, R. W. E., Pampallis, A., & Bond, C. (2002). Service quality in a cellular telecommunication company: a South African experience. *Managing Service Quality*, 12(5), 323-35
- Vanniarajan, T., & Gurunathan, P. (2009). Service quality and customer loyalty in cellular service market: An application of SEM. *Journal of Marketing and Communication*, 5(2), 45-54.



- Vuckovic, A., Kwantes, P.J., Humphreys, M., & Neal, A. (2014). A sequential sampling account of response bias and speed – accuracy trade offs in a conflict detection task. *Journal of Experimental Psychology*, 20(1), 55-68. doi:10.1037/xap000007
- Wang, C-Y., & Wu, L-W. (2012). Customer loyalty and the role of relationship length. *Managing Service Quality*, 22(1), 58-74. doi:10.1108/09604521211198119
- Wang, Y., Lo, H-P., & Yang, Y. (2004). An integrated framework for service quality, customer value, satisfaction: Evidence from China's telecommunication industry. *Information Systems Frontiers*, 6(4), 325-340
- Weiss, A.M. & Anderson, E. (1992). Converting from independent to employee Sales forces: The role of perceived switching costs. *Journal of Marketing Research*, 29 (1); 101-115
- Weyland, A. (2011). Engagement and talent management of Gen Y. *Industrial and Commercial training*, 43(7), 439-445. doi:10.1108/00197851111171863
- Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and customer satisfaction. *Journal of Consumer Research*, 18, 84-91
- Winther, M., & Craven, R. (2011). Microsoft-Skype tie-up accelerates mobile VOIP. Retrieved April 24, 2012 from <http://www.asean.idc.asia>
- Wong, A. & Sohal, A. (2003). Service quality and customer loyalty perspectives on two levels of retail relationships. *Journal of Services Marketing*, 17(5), 495-513. doi:10.1108/08876040310486285
- World Travel and Tourism Council (2014). Travel & tourism. Economic impact 2014 Malaysia. Retrieved May 30, 2015 from <http://www.wttc.org>.
- Yaacob, M.R., Ismail, N.R.N., & Ismail, N.S. (2008). An investigation of the determinants of customers' loyalty of the MAXIS Communication Berhad. Universiti Malaysia Kelantan., 1-14. Retrieved on December, 19, 2010, from [http://internationalconference.com.my/proceeding/icber\\_2010\\_proceeding/PAPER\\_271\\_DeterminantsOfCustomersLoyalty.pdf](http://internationalconference.com.my/proceeding/icber_2010_proceeding/PAPER_271_DeterminantsOfCustomersLoyalty.pdf).
- Yang, S. (2015). Understanding B2B customer loyalty in the mobile telecommunication industry: a look at dedication and constraint. *Journal of Business and Industrial Marketing*, 30(2), 1-34. doi:10.1108/JBIM-05-2013-0105
- Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction and loyalty: The role of switching costs. *Psychology and Marketing*, 21(10), 799-822. doi:10.1002/mar.20030

- Yaya, L.H.P., Marimon, F., & Casadesus, M. (2011). Customer's loyalty and perception of ISO 9001 in online banking. *Industrial Management and Data Systems*, *111*(8), 1194-1213. doi:10.1108/02635571111170767
- Yen, Y-S. (2010). Can perceived risks affect the relationship of switching costs and customer loyalty in e-commerce. *Internet Research*, *20*(2), 210-224. doi:10.1108/10662241011032254
- Yen, Y-X., Wang, E. S-H., & Horng, D.F. (2011). Suppliers' willingness of customization, effective communication, and trust: a study of switching cost antecedents. *Journal of Business and Industrial Marketing*, *26*(4), 250-259. Doi:10.1108/08858621111126992
- Yu, C-H., Chang, H-C., & Huang, G-L. (2006). A study of service quality, customer satisfaction and loyalty in Taiwanese leisure industry. *Journal of American Academy of Business*, *9*(1), 126-132
- Yu, C-M., J., Wu, L-Y., Chiao, Y. C., & Tai, H-S. (2005). Perceived Quality, Customer Satisfaction and Customer Loyalty: The Case of Lexus in Taiwan. *Total Quality Management and Business Excellence*, *16*(6), 707-719
- Zaman, K., Bibi, S., Arshad, A. & Shahzad, A. (2012). Customer loyalty in FMCG sector of Pakistan. *Information Management and Business Review*, *4*(1), 41-48
- Zand, D.E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, *17*, 229-239
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value; a means-end model and synthesis of evidence. *Journal of Marketing*, *52*, 2-21
- Zeithaml, V.A., Berry, L. L. & Parasuraman, A. (1996). The behavioral, consequences of service quality. *Journal of Marketing*, *60*(2), 31-46
- Zhou, T., Li, H., & Liu, Y. (2010). The effect of flow experience on mobile sns users' loyalty. *Industrial Management and Data Systems*, *110*(6), 930-946. doi:10.1108/02635571011055126
- Zins, A.H. (2001). Relative attitudes and commitment in customer loyalty models: Some experiences in commercial airline industry. *International Journal of Service Industry Management*, *12*(3), 269-294. doi:10.1108/07363760310483676
- Zita, K. (2004). Malaysian Telecom Brief. Retrieved September 12, 2010, from [http://www.ndaventures.com/Malaysia\\_Brief.pdf](http://www.ndaventures.com/Malaysia_Brief.pdf)