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**THE UNIQUE ANTECEDENTS OF CUSTOMER LOYALTY
TOWARDS MOBILE SERVICE**



**By
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Universiti Utara Malaysia

**Thesis Submitted to
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In Partial Fulfillment of the Requirement for the Master of Science
(Management)**



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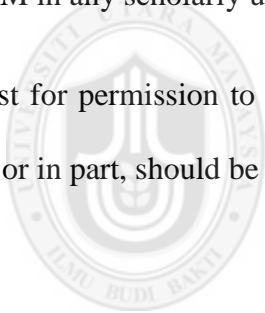
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ABSTRACT

Customer loyalty has been highly sought topic to enable growth and competitiveness enhancement in current market situation. The increase of telecommunication sector in the country had influence mobile service providers competing with each other to become a major service provider. Specifically, there is an issue when the number of mobile cellular subscriptions and penetration rate in Malaysia had declined in the first quarter of 2017 compared to 2016. Customer loyalty is important in increasing profitability and continued survival in competitive market. There are limited studies conducted in Malaysia on customer loyalty towards mobile service providers. This study tries to fill the contextual gap by investigating the effects of independent variables and the mediating effects of satisfaction. Additionally, this study intends to investigate perceived quality, corporate image, perceived value, satisfaction that influence customer loyalty and perceived quality, corporate image, perceived value that influence satisfaction. It also aims to examine the influence of satisfaction as a mediator between perceived quality, corporate image, perceived value and customer loyalty. A total of 531 questionnaires were distributed and 431 questionnaires were obtained and usable. Partial Least Squares 2.0 (PLS) was used to analyze the data. The findings indicate that perceived quality does not influence customer loyalty, whereby corporate image, perceived value and satisfaction influence customer loyalty. Meanwhile, perceived quality, corporate image and perceived value also have strong relationship on satisfaction. Satisfaction also mediates the relationship between perceived quality, corporate image, perceived value and customer loyalty. The outcome of this study can be used by service providers to enhance and improve customer loyalty in the context of mobile service providers. The findings extend researchers' understanding of predictors that influence customer loyalty in mobile service providers in Malaysia.

Keywords: customer loyalty, mobile service providers, perceived quality, corporate image, perceived value and satisfaction.

ABSTRAK

Kesetiaan pelanggan menjadi topik perhatian yang hangat dalam usaha meningkatkan pertumbuhan dan daya saing dalam keadaan pasaran semasa. Peningkatan sektor telekomunikasi di negara ini telah mempengaruhi persaingan antara pembekal perkhidmatan mudah alih untuk menjadi penyedia perkhidmatan utama. Secara khusus, terdapat masalah apabila bilangan langganan dan kadar penembusan selular mudah alih di Malaysia menurun pada suku pertama 2017 berbanding tahun 2016. Kesetiaan pelanggan penting dalam meningkatkan keuntungan dan meneruskan kewujudan dalam pasaran bersaing. Terdapat kajian yang terhad dijalankan di Malaysia mengenai kesetiaan pelanggan terhadap penyedia perkhidmatan mudah alih. Kajian ini cuba untuk mengisi jurang konteks dengan menyelidik kesan pembolehubah dan kesan pengantara terhadap kepuasan. Tambahan pula, kajian ini bertujuan mengkaji tanggapan kualiti, imej korporat, tanggapan nilai, kepuasan yang mempengaruhi kesetiaan pelanggan dan tanggapan kualiti, imej korporat, tanggapan nilai yang mempengaruhi kepuasan. Ia juga bertujuan mengkaji pengaruh kepuasan sebagai pengantara bagi tanggapan kualiti, imej korporat, tanggapan nilai dan kesetiaan pelanggan. Sebanyak 531 soal selidik telah diedarkan dan 431 soal selidik telah diperolehi dan boleh digunakan. Partial Least Squares 2.0 (PLS) digunakan untuk menganalisis data. Penemuan menunjukkan bahawa tanggapan kualiti tidak mempengaruhi kesetiaan pelanggan, di mana imej korporat, tanggapan nilai dan kepuasan mempengaruhi kesetiaan pelanggan. Sementara itu, tanggapan kualiti, imej korporat, dan tanggapan nilai juga mempunyai hubungan yang kuat dengan kepuasan. Kepuasan juga menjadi perantara hubungan bagi tanggapan kualiti, imej korporat, tanggapan nilai dan kesetiaan pelanggan. Hasil kajian ini dapat digunakan oleh penyedia perkhidmatan untuk meningkatkan dan memperbaiki kesetiaan pelanggan dalam bidang penyediaan perkhidmatan mudah alih. Penemuan ini menambah kefahaman penyelidik mengenai peramal-peramal yang mempengaruhi kesetiaan pelanggan kepada penyedia perkhidmatan mudah alih di Malaysia.

Kata kunci: kesetiaan pelanggan, penyedia perkhidmatan mudah alih, tanggapan kualiti, imej korporat, tanggapan nilai dan kepuasan.

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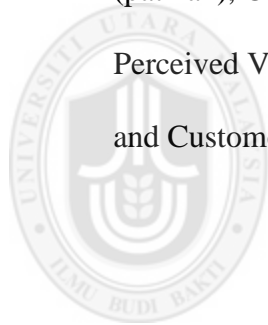


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LIST OF ABBREVIATIONS

Abbreviation	Descriptions of Abbreviation
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CI	Corporate Image
CL	Customer Loyalty
CR	Composite Reliability
EDT	Expectancy Disconfirmation Theory
IT	Information Technology
MCMC	Malaysian Communications and Multimedia Commission
N	Population Size
PLS	Partial Least Squares
PQ	Perceived Quality
PV	Perceived Value
S	Sample Size
SAT	Satisfaction
SPSS	Statistical Package for the Social Sciences
STM	Syarikat Telekom Malaysia Berhad
TMB	Telekom Malaysia Berhad
UUM	Universiti Utara Malaysia

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Customer loyalty has received attention from previous scholars in different context, for example, banking industry, hotel industry, hospitality industry and retail industry. However, not much study has been done to examine the customer loyalty in the telecommunications industry. This study discussed the significance and influence of perceived quality, corporate image, perceived value, and satisfaction towards customer loyalty in mobile service providers. This chapter provides an overview of the background of the study, problem statement, research questions, research objectives, significance of the study, scope of research and definition terms used in the study.

1.2 Background of the Study

For the past fifteen years, telecommunication sector in Malaysia has undergone structural and physical changes. In the year between 1985 and 2000, telephone penetration rate increased by 540%. Meanwhile, in the starting year from 1987, fixed line penetration ratio has increased after telecommunications reforms. On the other hand, cellular phone subscriptions increased rapidly in the early of 1990. In addition, mobile phone subscribers in Malaysia had increased to 5.1 million subscribers in the year 2000 (Cassey, 2001).

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References

- Abubakar, A. (2016). Impact of perceived service quality by mobile telecommunication industry on customer satisfaction in Nigeria. *International Journal of Advanced Research*, 4(4), 845-852.
- Agyei, P. M. and Kilika, J. M. (2014). The relationship between corporate image and customer loyalty in the mobile telecommunication market in Kenya. *Management Studies*, 2(5), 299-308.
- Alhaddad, A. (2015). Perceived quality, brand image, and brand trust as determinants of brand loyalty. *Journal of Research in Business and Management*, 3(4), 1-8.
- Alnsour, M. S., Tayeh, B. A. and Alzyadat, M. A. (2014). Using SERQUAL to assess the quality of service provided by Jordanian telecommunications sector. *International Journal of Commerce and Management*, 24(3), 209-218.
- Aydin, S. and Ozer, G. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunications. *European Journal of Marketing*, 39(7/8), 910-925.
- Aydin, S., Ozer, G. and Arasil, O. (2005). Customer loyalty and the effect of switching costs as a moderator variable. *Marketing Intelligence and Planning*, 23(1), 89-103.
- Bagozzi, R. P. (1995). Reflections on relationship marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23(4), 272-277.
- Beerli, A., Martin, J. D. and Quintana, A. (2004). A model of customer loyalty in the retail banking market. *European Journal of Marketing*, 38(1/2), 253-275.
- Beneke, J., Hayworth, C., Hobson, R. and Mia, Z. (2012). Examining the effect of retail service quality dimensions on customer satisfaction and loyalty: The case of supermarket shopper. *Acta Commercii*, 12(1), 27-43.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.
- Bloemer, J. and Rutger, K. D. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, 32(5/6), 499-513.

- Bloemer, J., Ruyter, K. D. and Peeters, P. (1998). Investigating drivers of bank loyalty: The complex relationship between image, service quality and satisfaction. *International Journal of Bank Marketing*, 16(7), 276-286.
- 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.
- Cassey, L. (2001). Telecommunications reforms in Malaysia. *Annals of Public and Cooperative Economics*, 73(4), 521-540.
- Chang, H. H. and Wang, H. W. (2011). The moderating effect of customer perceived value on online shopping behavior. *Online Information Review*, 35(3), 333-359.
- Chen, C. F. and Chen, F. S. (2010). Experience quality, perceived value, satisfaction and behavioral intention for heritage tourists. *Tourism Management*, 31, 29-35.
- Chumpitaz, R. and Paparoidamis, N. G. (2004). Service quality and marketing performance in business-to-business markets: Exploring the mediating role of client satisfaction. *Managing Service Quality: An International Journal*, 14(2/3), 235-248.
- Clemes, M. D., Shu, X. and Gan, C. (2013). Mobile communications: A comprehensive hierarchical modeling approach. *Asia Pacific Journal of Marketing and Logistics*, 26(1), 114-146.
- Cooper, D. and Schindler, P. (2006). *Business Research Methods* (9th ed). McGraw Hill.
- Cudjoe, A. G., Anim, P. A. and George, A. A. (2015). Effect of customer's satisfaction of service delivery on customers' retention of Tigo telecommunication network. *The International Journal of Business and Management*, 3(1), 146-162.
- Dick, A. and Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Dovaline, A., Masiulyte, A. and Piligrimiene, Z. (2015). The relations between customer engagement, perceived value and satisfaction: The case of mobile application. *Procedia-Social and Behavioral Sciences*, 213, 659-664.

- Egblopeali, A. Y. and Aimin, W. (2011). *Reosearly on effects of corporate image, customer satisfaction and switching cost on customer loyalty in Togolese telecommunication companies*. In Proceedings of the 7th International Conference on Innovation & Management, 1014-1017.
- Eggert, A. and Ulaga, W. (2002). Customer perceived value: A substitute for satisfaction in business markets? *Journal of Business and Industrial Marketing*, 12(2/3), 107-118.
- Elkhani, N. and Aryati, B. (2013). Review on expectancy disconfirmation theory (EDT) model in b2c e-commerce. *Journal of Research and Innovation in Information Systems*, 2, 1-13.
- Ene, S. and Ozkaya, B. (2014). A study of corporate image, customer satisfaction and brand loyalty in the context of retail stores. *Asian Social Science*, 10(14), 52-66.
- Esmailpour, M. and Barjoei, S. (2016). The effect of corporate image on customer satisfaction through brand equity. *Advances in Management and Applied Economics*, 6(4), 95-109.
- Faryabi, M., Kaviani, F. and Yasrebdoost, H. (2012). The relationship between perceived value and customer satisfaction the banking industry in Iran. *Australian Journal of Basic and Applied Sciences*, 6(12), 76-85.
- Fornell, C. and Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Gallarza, M. G. and Saura, I. G. (2006). Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behavior. *Tourism Management*, 27, 437-452.
- Gorondutse, A. H. and Haim, H. (2013). Mediation effect of customer satisfaction on the relationship between service quality and customer loyalty in the Nigerian foods and beverages: Sobel test approach. *International Journal of Management Science and Engineering Management*, 9(1), 1-8.
- Gorondutse, A. H., Hilman, H. and Nasidi, M. (2014). Relationship between corporate and customer loyalty on Nigerian food and beverages industry: PLS approach. *International Journal Management Business Research*, 4(2), 125-136.
- Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.

- Gumussoy, C. A. and Koseoglu, B. (2016). The effects of service quality, perceived value and price fairness on hotel customer's satisfaction and loyalty. *Journal of Economics, Business and Management*, 4(9), 523-527.
- Hair, J., Anderson, R., Tatham, R. and Black, W. (1995). *Multivariate data analysis with readings* (4th ed). Englewood Cliffs: Prentice-Hall international.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. and Tatham, R. L. (2006). *Multivariate Data Analysis* (Vol. 6). New Jersey: Prentice Hall.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151.
- Hair, J. F., Hult, G. T. M, Ringle, C. M. and Sarstedt, M. (2017). *A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed). USA: Sage Publication, Inc.
- Hart, A. E. and Rosenberger, P. J. (2004). The effect of corporate image in the formation of customer loyalty: An Australian Replication. *Australasian Marketing Journal*, 12(3), 88-96.
- Haslinda, H., Kiong, T. P. and Raja, A. A. (2014). Effects of perceived value and trust on customer loyalty towards foreign banks in Sabah, Malaysia. *Global Journal of Emerging Trends in e-business, Marketing and Consumer Psychology*, 1(2), 137-153.
- Hayes, B. (1993). *Measuring customer satisfaction: Survey design, use and statistical analysis methods*. Milwaukee: ASQ quality Press.
- Henseler, J. R., Ringle, C. M. and Sinkovics, R. R. (2009). The use of partial least square modeling in international marketing. *Advances in International Marketing*, 20, 277-319.
- Ho, T. H., Olsen, S. O. and Duong, T. T. (2006). The relationship among perceived quality, consumer satisfaction and loyalty in the Vietnamese market for seafood. *IIFET*, 1-9.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597-606.
- Huang, C. L. (2016). Relationship among corporate image, service quality, switching costs, customer satisfaction and loyalty: An example of Toyota's distributors in Taiwan. *International Journal of Information Technology and Business Management*, 51(1), 10-33.

- Hu, K. C. and Huang, M. C. (2011). Effects of service quality, innovation and corporate image on customer's satisfaction and loyalty of air cargo terminal. *International Journal of Operations Research*, 8(4), 36-47.
- Isaac, S. and Michael, W. B. (1990). *Handbook in Research and Evaluation*. San Diego, CA: Edits Publisher.
- Iglesias, M. P. and Guillen, M. J. Y. (2004). Perceived quality and price: Their impact on the satisfaction of restaurant customers. *International Journal of Contemporary Hospitality Management*, 16(6), 373-379.
- Izogo, E. E. (2017). Customer loyalty in telcom service sector: The role of service quality and customer commitment. *The TQM Journal*, 29(1), 19-36.
- Jayawardhena, C. (2010). The impact if service encounter quality in service evaluation: Evidence from business-to-business context. *Journal of Business and Industrial Marketing*, 25(5), 338-348.
- Kaura, V., Prasad, C. S. D. and Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing*, 33(4), 404-422.
- Kim, M. K., Park, M. C. and Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korea mobile telecommunication services. *Telecommunication Policy*, 28(2), 145-159.
- Kim, Y. E. and Lee, J. W. (2010). Relationship between corporate image and customer loyalty in mobile telecommunications service markets. *Africa Journal of Business Management*, 4(18), 4035-4041.
- Krasna, T. (2008). The influence of perceived value on customer loyalty in Slovenian hotel industry. *Turizam*, 12, 12-15.
- Krejcie, R. V. and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 20, 607-610.
- Kuo, C. W. and Tang, M. L. (2011). Relationships among service quality, corporate image, customer satisfaction, and behavioral intention for the elderly in high speed rail services. *Journal of Advanced Transportation*, 47(5), 512-525.
- Lai, M. C. and Chou, F. S. (2010). The effect of experiential value, perceived quality and customer satisfaction on customer lifetime value: An example using star cruises. *Chinese Business Review*, 9(11), 55-60.

- Lambe, C. J., Wittmann, C. M. and Spekman, R. E. (2001). Social exchange theory theory and research on business-to-business relational exchange. *Journal of Business-to-Business Marketing*, 8(3), 1-36.
- Lankton, N. K. and McKnight, H. D. Examining two expectation disconfirmation theory models: Assimilation and asymmetry effects. *Journal of Association for Information Systems*, 13(2), 88-115.
- Lanphear, J. H. (2001). Commentary: Pilot studies. *Education for Health*, 14(1), 33-35.
- Lee, J., Lee, J. and Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: Mobile phone service in France. *Journal of Service Marketing*, 15(1), 35-48.
- Li, J. (2013). Factors affecting customer satisfaction and customer loyalty towards Belle footwear company in Lanzhou City, Gansu province of the people's republic of China. *IOSR Journal of Business and Management*, 14(2), 41-48.
- Liang, D. (2008). The determining factors of customer loyalty for luxury hotels in US. *The Journal of International Management Studies*, 3(2), 167-175.
- Lin, H. H. and Wang, Y. S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Journal of Information and Management*, 3, 271-282.
- MacInnis, D. J. and Price, L. L. (1987). The role of imagery in information processing: Review and extensions. *Journal of Consumer Research*, 13(4), 473-491.
- MacKinnon, D. P., Fairchild, A. J. and Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614.
- Macropolis. (2015). *Top telecom in Malaysia: Malaysia's largest telecoms*. Retrieved from, <http://www.marcopolis.net/top-telecoms-in-malaysia-malaysia-s-largest-telecoms.htm>.
- Magasi, C. (2016). Determinants of customer loyalty in Sub-Saharan African banking industry: An empirical review. *International Journal of Economics, Commerce and Management*, 4(2), 574-588.
- Malaysian Communications and Multimedia Commission. (MCMC). (2016). *Digital Connectivity: Industry performance report 2016*. Retrieved from <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IPR-2016-Digital-Connectivity.pdf>

- Malaysian Communications and Multimedia Commission. (MCMC). (2017). *Communication and multimedia: Pocket book of statistics*. Cyberjaya: Adspert Sendirian Berhad.
- Marakanon, L. and Panjakajornsak, V. (2017). Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart Journal of Social Science*, 38, 24-30.
- Maria, A. R. and Yusniza, K. (2016). Predictors of customer Loyalty in the Malaysian hotel's outsourcing relationships. *International Review of Management and Marketing*, 6(S8), 205-211.
- Martensen, A. (2007). Tweens' satisfaction and brand loyalty in the mobile phone market. *Young Consumers*, 8(2), 108-116.
- Minh, N. V. and Huu, N. H. (2016). The relationship between service quality, customer satisfaction and customer loyalty: An investigation in Vietnamese retail banking sector. *Journal of Competitiveness*, 8(2), 103-116.
- Najafi, H., Rahmani, F. and Safari, M. (2015). Evaluation of effect of brand on customer loyalty in the banking industry. *MAGNT Research Report*, 3(2), 908-914.
- Nguyen, N. and LeBlanc, G. (2001). Corporate image and corporate reputation is customers' retention decisions in services. *Journal of Retailing and Customer Services*, 8, 227-236.
- Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theory*. New York: McGraw Hill.
- Ogunnaike, O. O. and Olaleke, O. (2010). Assessing the relationship between service quality and customer satisfaction: Evidence from Nigerian banking industry. *Global Journal of Management and Business Research*, 10(3), 2-5.
- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(3), 25-48.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(special issue October), 33-44.
- Olorunniwo, F., Hsu, M. K. and Udo, G. J. (2006). Service quality, customer satisfaction, and behavioral intentions in the service factory. *Journal of Service Marketing*, 20(1), 59-72.
- Pearson, N. (1996). Building brands directly: Creating business value from customer relationships. *Macmillan Business*, 20(6), 68-82.

- Preacher, K. J. and Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behaviors Research Methods, Instruments, and Computers*, 36(4), 717-731.
- Quyet, T. V., Vinh, N. Q. and Chang, T. (2015). Service quality effects on customer satisfaction in banking industry. *International Journal of u- and e- Service, Science and Technology*, 8(8), 199-206.
- Rahi, S. and Mazuri, A. G. (2016). Internet banking, customer perceived value and loyalty: The role of switching costs. *Journal of Accounting and Marketing*, 5(4), 1-7.
- Ram, J. and Wu, M. L. (2016). A fresh look at the role of switching cost in influencing customer loyalty. *Asia Pacific Journal of Marketing and Logistics*, 28(4), 616-633.
- Rutyer, K. D., Wetzels, M. and Bloemer, J. (1998). On the relationship between perceived service quality, service loyalty and switching costs. *International Journal of Science Industry Management*, 9(5), 436-453.
- Salkind, N. J. (2012). *Exploring Research* (8th ed). Upper Saddle River, New Jersey: Pearson Education, Inc.
- Santouridis, I. and 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.
- Sekaran, U. (2003). *Research Method for Business* (4th ed). New York: John Wiley and Sons, Inc.
- Sekaran, U. and Bougie, R. (2009). *Research Methods for Business: A Skill Building Approach* (5th ed). United Kingdom: John Wiley and Sons Ltd.
- Setiawan, H. and Sayuti, A. J. (2017). Effects of service quality, customer trust and corporate image on customer satisfaction and loyalty: An assessment of travel agencies customer in South Sumatra Indonesia. *IOSR Journal of Business and Management*, 19(5), 31-40.
- Setyono, L., Kusumawati, A. and Mawardi, M. K. (2015). The effect of Islamic marketing and corporate image on customer satisfaction and customer loyalty. *Journal of Administration Business*, 27, 1-10.
- Shiau, W. L. and Luo, M. M. (2012). Factors affecting online group buying intention and satisfaction: A social exchange theory perspective. *Computers in Human Behavior*, 28(6), 2431-2444.

- Stefanou, C. J., Sarmaniotis, C. and Stafyla, A. (2003). CRM and customer-centric knowledge management: An empirical research. *Business Process Management Journal*, 9(5), 617-634.
- Sweeney, J. C. and Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220.
- Tu, Y. T., Wang, C. M. and Chang, H. C. (2012). Corporate brand image and customer satisfaction on loyalty: An empirical study of Starbucks coffee in Taiwan. *Journal of Social and Development Sciences*, 3(1), 24-32.
- Ushantha, R. A. C., Wijeratne, A. W. and Samantha, P. A. P. (2014). Customer's perception on service quality towards satisfaction: An application of SERVPERF in state sector banks in Sri Lanka. *European Journal of Business and Management*, 6(4), 72-81.
- Vandermerwe, S. (2003). Customer-minded growth through services. *Managing Service Quality*, 13(4), 262-266.
- Wang, L. and Chaipoopirutana, S. (2014). *The influence of perceived service quality, corporate image, customer satisfaction and value on customer loyalty of agriculture bank of China in Kunming, China*. International Conference on Trends in Economics, Humanities and Management, 172-176.
- Yang, X., Wu, J., Zhang, X., Zuo, F. and Yu, Q. (2009). Switching costs between customer satisfaction and loyalty-empirical evidence from broadband services in Mainland China. *International Joint Conference on Computational Science and Optimization*, 1, 768-772.
- Yu, C. M. J., Wu, L. Y., Chiao, Y. C. and Tai, H. S. (2005). Perceived quality, customer satisfaction, and customer loyalty: The case of Lexus in Taiwan. *Total Quality Management*, 16(6), 709-719.
- Zaibaf, M., Taherikia, F. and Fakharian, M. (2013). Effect of perceived service quality on customer satisfaction in hospitality industry: Gronroos' service quality model development. *Journal of Hospitality Marketing and Management*, 22, (490-504).
- Zahir, O., Liana, M. and Ratna, K. M. (2015). An empirical study of direct relationship of service quality, customer satisfaction and bank image on customer loyalty in Malaysian commercial banking industry. *American Journal of Economics*, 5(2), 168-176.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means ends model and synthesis of evidence. *Journal of Marketing*, 52, 2-22.

Zhou, T., Li, H. and Liu, Y. (2010). The effect of flow experience on mobile SNS users' loyalty. *Industrial Management and Data Systems*, 110(6), 930-946.

Zikmund, W. G., Babin, B. J., Carr, J. C., and Griffin, M. (2013). *Business Research Methods* (9th ed). Canada: South-Western Cengage Learning.



Appendix A: Adapted Items and Original Items

i) Customer Loyalty

Adapted Items	Original Items	Source
1. If I bought a new GSM line, I would prefer this GSM operator.	1. If I bought a new mobile service provider, I would prefer the same brand as my current mobile service provider.	Aydin and Ozer (2005)
2. I encourage friends who plan to buy a GSM line.	2. I will encourage friends who plan to buy a new mobile service provider to use my current mobile service provider.	
3. Even if the other operators' billing was cheaper, I would go on using this GSM line.	3. Even if the other mobile service providers' billing was cheaper, I would go on using my current mobile service provider.	Izogo (2017)
4. When topic on my network service provider comes up in conversation, I will go out of my way to recommend my network service provider.	4. When topic on my current mobile service provider comes up in conversation, I will go out of my way to recommend my current mobile service provider.	
5. I will continue using my network service provider for a long period of time.	5. I will continue using my current mobile service provider for a long period of time.	

Appendix A: Adapted Items and Original Items (Continued)

ii) Perceived Quality

Adapted Items	Original Items	Source
1. When you have a problem, X shows a sincere interest in solving it.	1. When you have a problem, your current mobile service provider shows a sincere interest in solving it.	Beerli et al. (2004)
2. Employees of X solve your problems when they promise to do so.	2. Employees of your current mobile service provider solve your problems when they promise to do so.	
3. Employees of X give you prompt service.	3. Employees of your current mobile service provider give you prompt service.	
4. Employees of X are always willing to help you.	4. Employees of your current mobile service provider are always willing to help you.	
5. Employees of X are constantly courteous to you.	5. Employees of your current mobile service provider are constantly courteous to you.	
6. Employees of X have the knowledge to answer your questions.	6. Employees of your current mobile service provider have the knowledge to answer your questions.	

Appendix A: Adapted Items and Original Items (Continued)

iii) Corporate Image

Adapted Items	Original Items	Source
1. This company is stable and firmly established.	1. My current mobile service provider is stable and firmly established.	Aydin and Ozer (2005)
2. This company is innovative and forward-looking.	2. My current mobile service provider is innovative and forward-looking.	
3. This company has social contribution for society.	3. My current mobile service provider has social contribution for society.	
4. I have always had a good impression of the service provider.	4. I always have a good impression on my current mobile service provider.	Clemes et al. (2013)
5. In my opinion, the service provider has a good image in the minds of consumers.	5. In my opinion, my current mobile service provider has a good image in the minds of consumers.	
6. Overall, I consider that the service provider has a positive image in the marketplace.	6. Overall, I consider that my current mobile service provider has a positive image in the marketplace.	

Appendix A: Adapted Items and Original Items (Continued)

iv) Perceived Value

Adapted Items	Original Items	Source
1. The services that I receive from the service provider provide value for money.	1. The services that I receive from my current mobile service provider provide value for money.	Clemes et al. (2013)
2. Compared to what I have to give up, such as money, time, energy, and effort, the services that I receive from the service provider are excellent.	2. Compared to what I have to give up, such as money, time, energy, and effort, the services that I receive from my current mobile service provider are excellent.	
3. Overall, I feel the service provider's services and goods are valuable.	3. Compared to what I have to give up, such as money, time, energy, and effort, the services that I receive from my current mobile service provider are excellent.	
4. XYZ service products are an excellent value.	4. My current mobile service provider's products are an excellent value.	Jayawardhena (2010)
5. What we get from XYZ, and its cost, makes it a great value.	5. What I get from my current mobile service provider, and its cost, makes it a great value.	

Appendix A: Adapted Items and Original Items (Continued)

v) Satisfaction

Adapted Items	Original Items	Source
1. This GSM line completely meets expectations from any GSM line.	1. My current mobile service provider completely meets expectations from other mobile service providers.	Aydin et al. (2005)
2. I am satisfied with this GSM line.	2. I am satisfied with my current mobile service provider.	
3. This GSM line meets my pre-purchase expectations.	3. My current mobile service provider meets my pre-purchase expectations.	
4. My choice to be a subscriber of other service provider is a wise one.	4. My choice to be a subscriber of my current mobile service provider is a wise one	Clemes et al. (2013)
5. I feel delighted with the services and goods delivered by the service provider.	5. I feel delighted with services and goods delivered by my current mobile service provider.	
6. Overall, the service provider provides a very satisfying experience.	6. Overall, my current mobile service provider provides a very satisfying experience.	

Appendix B: Questionnaire



The Unique Antecedents of Customer Loyalty Towards Mobile Service.

Dear Respondents,

You are invited to participate in a survey that constitutes part of my Master thesis at Universiti Utara Malaysia (UUM). This survey is to investigate the predictors of customer loyalty towards mobile service providers in UUM. This questionnaire will take approximately 10-15 minutes to complete. Information provided will be kept confidential and will be used purely for academic purpose. I do hope that you will complete all the questions. I would therefore value your kind assistance and valuable time in completing the attached questionnaire and please return the questionnaire back to me. Your participation in making this research a success is greatly appreciated. Should you have any queries or if you are interested to know the outcomes of the research kindly contact me.

Yours Sincerely,

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Universiti Utara Malaysia.
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Dr. Maria Abdul Rahman
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Department of Marketing
School of Business Management
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Section A: Personal Information

Instruction: Please tick (√) or fill in appropriate space.

1. Gender:

Male	
Female	

2. Age:

20 years	
21-30 years	
31-40 years	
41-50 years	
Above 51 years	

3. Level of Education:

Undergraduate	
Master	
PhD	

4. Current mobile service provider:

Maxis	
Digi	
Celcom	
Umobile	
Others: (please specify)	

5. How long have you been using this mobile service providers:

Less than 1 year	
More than 1 year	

6. How many times have you switched to another mobile service provider?

Never	
1-3 times	
4-6 times	
More than 6 times	

7. Where did you get the information about mobile service providers? Can be more than one answer.

TV/Radio	
Family/Friends	
Magazines/ Newspaper	
Internet	
Other: (please specify)	

8. Type of mobile connection that you use?

Prepaid	
Postpaid	

Section B: Please tick (√) how strongly you agree or disagree with each of the following statement based on the Likert-scale below:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

		1	2	3	4	5
PQ1	When you have a problem, your current mobile service provider shows a sincere interest in solving it.					
PQ2	Employees of your current mobile service provider solve your problems when they promise to do so.					
PQ3	Employees of your current mobile service provider give you prompt service.					
PQ4	Employees of your current mobile service provider are always willing to help you.					
PQ5	Employees of your current mobile service provider are constantly courteous to you.					
PQ6	Employees of your current mobile service provider have the knowledge to answer your questions.					
CI1	My current mobile service provider is stable and firmly established.					
CI2	My current mobile service provider is innovative and forward-looking.					
CI3	My current mobile service provider has social contribution for society.					
CI4	I always have a good impression on my current mobile service provider.					
CI5	In my opinion, my current mobile service provider has a good image in the minds of consumers.					
CI6	Overall, I consider that my current mobile service provider has a positive image in the marketplace.					
PV1	The services that I receive from my current mobile service provider provide value for money.					
PV2	Compared to what I have to give up, such as money, time, energy, and effort, the services that I receive from my current mobile service provider are excellent.					
PV3	Overall, I feel my current mobile service provider's service and goods are valuable.					

		1	2	3	4	5
PV4	My current mobile service provider's products are an excellent value.					
PV5	What I get from my current mobile service provider, and its cost, makes it a great value.					
SAT1	My current mobile service provider completely meets expectations from other mobile service providers.					
SAT2	I am satisfied with my current mobile service provider.					
SAT3	My current mobile service provider meets my pre-purchase expectations.					
SAT4	My choice to be a subscriber of my current mobile service provider is a wise one.					
SAT5	I feel delighted with services and goods delivered by my current mobile service provider.					
SAT6	Overall, my current mobile service provider provides a very satisfying experience.					
CL1	If I bought a new mobile service provider, I would prefer the same brand as my current mobile service provider.					
CL2	I will encourage friends who plan to buy a new mobile service provider to use my current mobile service provider.					
CL3	Even if the other mobile service providers' billing was cheaper, I would go on using my current mobile service provider.					
CL4	When topic on my current mobile service provider comes up in conversation, I will go out of my way to recommend my current mobile service provider.					
CL5	I will continue using my current mobile service provider for a long period of time.					

End of questions. Thank you for your cooperation.