ANTECEDENTS OF CUSTOMER SATISFACTION IN MOBILE COMMERCE CONTEXT

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This dissertation is dedicated to my mom and dad and to my beloved aunt Maryam whose memories stay with me forever....

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ABSTRACT

These days, customer satisfaction, understanding customers' requirements and the ability to reply to customers' needs in near real-time have become serious competitive drivers in a business context. With more satisfied customers, a business can expand its margins while improving selling opportunities. In order to enhance customer satisfaction, new mobile application services, need to be perceived as valuable additions to existing services. While the issue of customer satisfaction in relation to the provision of most goods and services by 'traditional' methods has been comprehensively examined in academic literature, little research exists regarding this issue with respect to mobile application services. As such, this study firstly undertook a systematic review of the available research into the antecedents of customer satisfaction in mobile commerce. This review process identified a list of antecedent factors of customer satisfaction in mobile commerce, related source models, methodologies, limitations and future work recommendations. Secondly, the study proposed a model for antecedents of customer satisfaction in mobile commerce (ACSM), based on the American Customer Satisfaction Index model. The construct of ACSM is defined and validated by the study, together with its underlying dimensionality through an investigation of 120 users of the Resorts World Genting mobile application, which was developed in Malaysia and is also used in this country. The results indicate that consumer expectations have no direct impact on both perceived value and customer satisfaction. However, perceived value has a significant impact on customer satisfaction for mobile application services, with perceived quality also having an impact.

ABSTRAK

Baru-baru ini, kepuasan pelanggan, memahami keperluan pelanggan, keupayaan untuk menyahut keperluan pelanggan dalam masa yang terdekat menjadi suatu persaingan yang serius dalam konteks perniagaan. Dengan adanya pelanggan perniagaan boleh meluaskan keuntungan dan dapat yang berpuas hati, satu meningkatkan peluang menjual. Dalam usaha untuk meningkatkan kepuasan pelanggan, perkhidmatan aplikasi mudah alih yang baru harus dilihat sebagai tambahan yang benilai kepada perkhidmatan yang sedia ada. Walaupun isu kepuasan pelanggan berhubung dengan peruntukkan kebanyakan barangan dan perkhidmatan dengan kaedah 'tradisional' telah diteliti secara menyeluruh dalam kajian akademik, sedikit penyelidikan wujud mengenai isu ini berkenaan dengan perkhidmatan aplikasi mudah alih.Oleh itu, kajian ini pertamanya menjalankan kajian sistematik penyelidikan yang sedia ada ke dalam latar belakang kepuasan pelanggan dalam perdagangan mudah alih. Ini kajian ini mengenalpasti senarai faktor-faktor yang kepuasan pelanggan dalam perdagangan mudah alih, model sumber yang berkaitan, kaedah - kaedah, had - had dan cadangan kerja-kerja masa depan. Kedua, kajian ini mencadangkan satu model untuk menerangkan mengenai kepuasan pelanggan dalam perdagangan mudah alih, American Customer Satisfaction Index model (ACSM). Pembinaan ACSM ditakrifkan dan disahkan, bersama-sama dengan kematraan asas melalui penyiasatan daripada 120 pengguna aplikasi mudah alih Resorts World Genting, yang telah dibangunkan di Malaysia dan juga digunakan di negara ini. Keputusan menunjukkan bahawa jangkaan pengguna tidak mempunyai kesan langsung ke atas kedua-dua nilai dilihat dan kepuasan pelanggan. Walau bagaimanapun, nilai yang dilihat mempunyai kesan yang penting ke atas kepuasan pelanggan bagi perkhidmatan aplikasi mudah alih, dengan menganggap bahawa kualiti yang dilihat juga mempunyai kesan..

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The internet and telecommunications have become increasingly prevalent in daily life since the 1990s. In 2011, there were approximately 2,265 million internet users and 5,972 million mobile phone users worldwide (Internet Telecommunication Union, 2012).

Commerce is one of the domains that continue to substantially benefit from the growth of internet technologies. Indeed, commerce has evolved from the traditional way of buying and selling to launching online transactions from browsers and lately, hand held mobile devices. This shift from commerce to e-commerce and now m-commerce, shows how easily individuals and organizations quickly embrace IT technologies and gadgets (Mostefaoui et al., 2011).

Recently, the potential for using m-commerce applications has led many organisations to expend substantial resources on these technologies. Delivering value added, interactive and location-based mobile services (e.g., banking, content download, emergency/ roadside assistance, etc.) to customers seems to be increasingly important in gaining a competitive edge by strengthening relationships with key customers (Lin &Wang, 2006). As the market becomes increasingly

mature, the competition for acquiring new customers and retaining existing customers becomes more intense. In this environment, customer satisfaction is a critical factor for mobile service providers to maintain or improve their market share and profitability.

This study establishes a customer satisfaction evaluation system for mobile commerce. It deals with managing applications and services that are becoming available from internet-enabled mobile devices, based on customer satisfaction antecedents.

1.2 Background to the Problem

These days, customer satisfaction, understanding customers' requirements and the ability to reply to them in near real-time is becoming increasingly competitive. With more satisfied customers, a business can expand its margins, while improving its selling opportunities. In order to enhance customer satisfaction, new mobile services need to be perceived as valuable additions to existing services(Dencker-Rasmussen, 2005).

Many researchers have undertaken significant studies in relation to customer satisfaction and loyalty in e-commerce, which are called e-satisfaction and e-loyalty, respectively (Choi et al., 2008). Although m-commerce has become a part of everyday life, customer satisfaction in m-commerce (m-satisfaction) has rarely been considered, because it has only been in existence for a relatively short period of time(Choi et al., 2008).

When m-commerce first emerged, the majority of researchers examined the issue of a customer's intention to accept m-internet, rather than customer satisfaction in m-commerce (Choi et al., 2008). However, notwithstanding the mobile web

services phenomenon, it has not yet been well explored by researchers. In fact, only a limited number of studies have been conducted which have focused on predicting the issues that play a role in the development of mobile user satisfaction and these operational strategies are not enough for the operators specialised in m-commerce.

The case study chosen for this thesis is the Resorts World Genting mobile application (RWG app), which was developed in Malaysia and is also used in Malaysia. Malaysians are usually very motivated about using mobile technology, as revealed by the growing numbers in the implementation of wireless technologies (Haque&Raihan, 2003). As reported by International Data Corporation Malaysia (IDC, 2012), smartphones are expected to increase their share in Malaysia's mobile market, expanding from 30% in 2011 to 35% in 2012 and to 50% by 2014. However, even though the usage of smartphones is high, m-commerce usage is still quite new compared to European and other Asia Pacific countries such as Japan, Taiwan, Hong Kong and Singapore.

According to user reviews (Android Apps on Google Play, 2013), RWG app carries the average rating four our out of five and a considerable number of users rank the app as a 1 star service provider in star ranking evaluation. However, users complain about many issues, like unexpected bugs and crashes, slow processing and content errors. Given this, this application needs to identify the factors which influence user satisfaction in order to fulfil users' requirements and to rectify deficiencies and restrictions of the application.

The present study suggests a summary of feasible and relevant experiences that may affect customer satisfaction in mobile commerce and especially in relation to the RWG app. The premise being that gaining more knowledge about mobile satisfaction strategies will lead to the better understanding of successful applications in the mobile commerce area. The results of this study will be helpful for not only academics and researchers engaged in the study of mobile commerce, but also for those involved in the design, management and implementation of the foundations of mobile commerce services, especially for RWG app providers.

1.3 Statement of the Problem

This research attempts to understand the answers some of the following problems:

- 1. What are the antecedents affecting customer satisfaction in relation to the Resorts World Genting mobile application?
- 2. How can mobile commerce help Resorts Worlds Genting mobile application providers increase customer satisfaction?
- 3. What are the criteria for a satisfactory mobile application for hotels from a customer's perspective?

This investigation adopted an appropriate research methodology to study the data to be collected. The study results would benefit the RWG app by answering the question, 'What are the antecedents affecting customer satisfaction in relation to the Resorts World Genting mobile application?'

1.4 **Project Objectives**

This study concentrates on the following objectives:

1. To derive relevant antecedent factors relating to customer satisfaction in mobile commerce.

- To develop a research model of antecedents for customer satisfaction in mobile commerce, based on the American Customer Satisfaction Index (ACSI) model.
- 3. To validate the proposed research model in a real case study setting.

1.5 Scope of the Project

Since mobile hotel apps are very popular with Malaysians (The Star Online, 2013), data used to test the measurement model was gathered from a mail survey, with a sample of the respondents using the RWG app, which was developed and is being used in Malaysia via two popular technology platforms, iPhone-based and Android-based. This app provides immediate access to the latest information on events, attractions, packages, recommended itineraries and other all year round activities at Resorts World Genting. Respondents were initially asked whether they had ever used the RWG app via m-commerce transactions; if they replied in the affirmative, they were asked to participate in the survey. This research formulates a comprehensive plan to explore the issues pertaining to customer satisfaction in relation to the RWG app.

1.6 The Importance of the Project

With the proliferation of wireless technologies, users are increasingly interfacing and interacting with m-commerce systems. It is therefore important to develop new instruments and scales, which are specifically targeted for these new interfaces and applications. In addition, user satisfaction is commonly acknowledged as one of the useful proxy measures of system success (Wang &Liao, 2007).

This study addresses the issue of what constitutes effective mobile applications by evaluating and measuring the construct of antecedents of customer satisfaction in m-commerce (ACSM). Based on the case study chosen, this study introduces and defines the construct of ACSM and also validates the construct and its underlying dimensionality. It is considered that this validated instrument will be useful to future researchers in developing and testing theories on m-commerce systems, as well as to the hotel industry, especially Resorts World Genting app providers in developing mobile services that are more widely accepted.

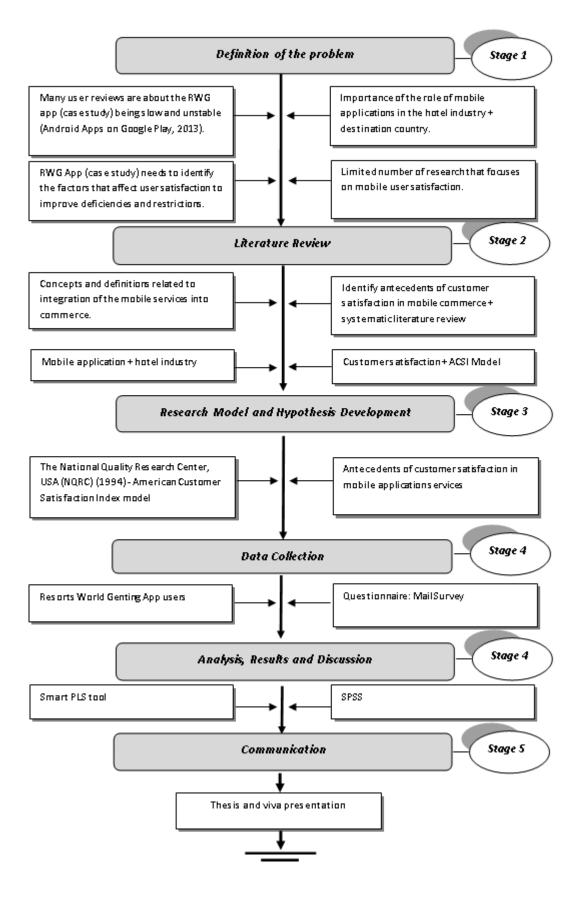


Figure 1.1 Research Diagram Strategy (RDS)

1.7 Chapter Summary

This chapter gives a brief overview of the goal of the project, the background to the problem and the statement of the problem. The chapter also outlines the objectives and scope of the project, establishes why the project is important and presents an appropriate answer to solve the problem identified.

REFERENCES

- Advani, R., &Choudhury, K. (2001).Making the most of B2C wireless.*Business* Strategy Review, 12(2), 39-49.
- Akhgar, B., Siddiqi, J., Foster, M., Siddiqi, H.,&Akhgar, A. (2002). Applying customer relationship management (CRM) in the mobile commerce market.*International Conference on Mobile Computing, Sponsored by EU* (IST), Greece.
- Anckar, B., &D'Incau, D. (2002).Value-added services in mobile commerce: An analytical framework and empirical findings from a national consumer survey.In Proceedings of the 35th *Hawaii International Conference on System Science*, Hawaii, USA, 2004.
- Anckar, B., &D'Incau, D. (2002). Value creation in mobile commerce: Findings from a consumer survey. *Journal of Information Technology Theory and Application*,4(1), 43-64.
- AhsanulHaque& Noor Raihan (2003). Mobile commerce: An evaluate customer perception for marketing strategy in Malaysia. Retrieved June 24, 2010 from http://repository.gunadarma.ac.id:8000/MOMM1200317.pdf
- Angelova, B. & Zekiri, J. (2011). Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model). International Journal of Academic Research in Business and Social Sciences, ISSN, 2222-6990.
- Au, N, Ngai, E. W. T., & Cheng, T. C. E. (2008).Extending the understanding of enduser information systems satisfaction formation: An equitable needs fulfillmentmodel approach.*MIS Quarterly*, 32(1), 43–66.
- Andreassen, T. W., &Lindestad, B. (1998).Customer loyalty and complex services, the impact of corporate image on quality, customer satisfaction and loyalty

for customers with varying degrees of service expertise. *International Journal ofService Industry Management*, 9, 7-23.

- Anderson, E. W., &Fornell, C. (2000).Foundations of the American Customer Satisfaction Index. *Total Quality Management & Business Excellence*, 11(7), 869–882.
- Aladwani, A. M. &Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39, 467-476.
- Bitner, M. J., Brown, S. W., & Meuter, M. L.(2000). Technology infusion in service encounters. *Journal of the Academy of Marketing Science*, 28(1), 138-149.
- 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), 1017-28.
- Kitchenham, B.A. (2004). Procedures for Undertaking Systematic Reviews, JointTechnical Report, Computer Science Department, Keele University (TR/SE-0401) and National ICT AustraliaLtd. (0400011T.1).
- Baggaley, A.R. (1982). Deciding on the ratio of the number of subjects to number of variables in factor analysis.*Multivariate Experimental Clinical Research*, 6, 81-85.
- Barclay, D., Higgins, C., & Thompson, R (1995). The Partial Least Squares (PLS) approachto causal modeling: Personal computer adoption and use as an illustration.Technology Studies, 2(2), 285-324.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303-316.
- Cho, Y., Im, I., Hiltz, R., &Fjermestad, J. (2002).The effects of post-purchase evaluation factors on online vs. offline customer complaining behavior: Implications for customer loyalty.*Advances in Consumer Research*, 29(1), 318-327.
- Choi, J., Seol, H., Lee, S., Cho, H. & Park, Y. (2008). Customer satisfaction factors of mobile commerce in Korea. *Internet Research*, 18, 313-336.
- Chunlan, L.,Zhonghua, D.,&Youlin, Z., (2011) Analysis on the Mobile Commerce user requirements at China in Business Management and Electronic Information (BMEI), 2011 International Conference, 622-625.

- Clarke, I. (2001). Emerging value propositions for m-commerce. *Journal of Business Strategies*, 18(2), 133-148.
- Cooil, B., Rust, R.T., (1995).General estimators for the reliability of qualitative data.*Psychometrika*, 60 (2), 199–220.
- Chin, W. W., &Newsted, P. R. (1999). Structural equation modeling analysis with small samples using partial least squares. *Statistical strategies for small sample research*, 1(1), 307-341.
- Crosby, L. A., & Johnson, S. L. (2001). Technology: Friend or foe to customer relationships? *Marketing Management*, 10(4), 10-11.
- Cassel, C. and Eklo"f, J.A. (2001).Modelling customer satisfaction and loyalty on aggregate levels: experience from the ECSI pilot study.*Total Quality Management*, 12(7), 834-41.
- Collins, G. (2010). Usable mobile ambient intelligent solutions for hospitality customers. *Journal of Information Technology Impact*, 10(1), 45-54.
- Collis J.& Hussey.R (2003). Business Research (2ndedn) Palgrave Macmillan: Basingstoke.
- Dholakia, N. & M. Rask (2002).Dynamic Elements of emerging Mobile Portal Strategies: M-Commerce is all about Personalization, Permission and Specification. *RITIM Workingpaper*.
- Dencker-Rasmussen, D. (2005). Mobile CRM Blends Sales And Service Roles For Greater Competitive Advantage. *Customer Interaction Solutions*, 24, 44.
- D. Zhaohua, Z. Jinlong, Z. Ling, L. Yaobin, & Wei K. K.(2009).Customer Satisfaction and Loyalty of Mobile Services in Mobile Business, 2009. ICMB 2009.*Eighth International Conference* on 2009, 115-119.
- Derek, G. (2006). Going Mobile, Hotels, 40(6), 42-42.
- Dilworth, D. (2009). Days Inn brings mobile to its premier hotels. *DM News*, 31(8), 4-4.
- Dermanov, V. &Eklo[°]f, J. (2001).Using aggregate customer satisfaction index: challenges and problems of comparison, with special reference to Russia. Total *Quality Management*, 12(7), 1054-63.
- Eggert, A.,&Ulaga,W.(2002). Customer perceived value:Asubstitute for satisfactionin business markets. *Journal of Business & Industrial Marketing*, 17(2–3), 107–118.

- Edwards, J. R., &Bagozzi, R. P. (2000).On the Nature and Direction of Relationships between Constructs and Measures. *Psychological Methods*, 5 (2), 155-174.
- Fornell, C., &Larcker, D. F. (1981). Structural equation models with unobservablevariables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.
- Fjermestad, J., & Romano, N. C., Jr. (2003).Electronic customer relationship management. Revisiting the general principles of usability and resistance— An integrative implementation framework, *Business Process Management Journal*, 9(5),572-591.
- Fishbein, M., &Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fornell, C., (1996). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6-21.
- Fornell, C., Johnson, M., Anderson, E., Cha, J. and Bryant, B. (1996). The American Customer Satisfaction Index: nature, purpose, and findings. *Journal of Marketing*, 60(4), 7-18.
- Fornell, C. (1992). A national customer barometer: the Swedish experience. *Journal* of Marketing, 56, 6-21.
- Fornell, C., Johnson, M., Anderson, E., Cha, J. and Bryant, B. (1996), The American Customer Satisfaction Index: nature, purpose, and findings, *Journal of Marketing*, 60 (4), 7-18.
- Gilbert, A. L., & Han, H. (2005). Understanding mobile data services adoption: Demography, attitudes or needs?*Technological Forecasting & Social Change*, 72, 327-337.
- Grönroos, C. (2000). Service management and marketing— A customer relationship management approach. New York: John Wiley & Sons, Ltd.
- Gefen, D., Straub, D. W., &Boudreay, M.-C (2000). Structural equation modelling andregressing: guidelines for research practice. *Communications of the AIS*, 4(7): 1-70.
- Ghapanchi, A. H. & Aurum, A. (2011). Antecedents to IT personnel's intentions to leave: A systematic literature review. J. Syst. Softw., 84, 238-249.
- Hanke, M. and Teo, T. S. (2003).Meeting the challenges in globalizing electronic commerce at United Airlines. *Journal of Information Technology Cases and Applications*.5, 4, 21-38.

- Heinonen, K. (2004). Reconceptualizing customer perceived value—The value of time and place. Managing Service Quality,14(2/3), 205-215.
- Helenius, J., &Liljander, V. (2005).Developing brand assets with wireless devices.InI. Clarke III & T. B. Flatherty (Eds.), *Advances in electronic marketing*.Hershey PA: Idea Group, 176-192.
- Hellier, P., Geursen, G., Carr, R. and Rickard, J. (2003).Customer repurchase intention: a general structural equation model. *European Journal of Marketing*, 37 (11/12), 1762-800.
- Hohenberg, H.E. and Rufera, S., (2004). Das MobiltelefonalsGeldbörse der Zukunft
 Chancen und Potentiale des Mobile Payment (M-Payment). In der markt: ZeitschriftfürAbsatzwirtschaft und Marketing, 43(168), 33-40.
- Hansemark, O. C. & Albinson, M.,(2004). Customer Satisfaction and Retention: The Experiences of Individual with Employees.*Managing Service Quality*, 14 (1).
- Hackl, P., Scharitzer, D. &Zuba, R. (2000).Customer satisfaction in the Austrian food retail market. *Total Quality Management*, 11(7), 999-1006.
- Hirschmann, A.O. (1970), Exit Voice and Loyalty Responses to Decline in Firms, Organizations and States, *Harvard University Press*, Cambridge, MA.
- Hassan, H. (2008). Ten Years after Asian Financial Crisis 1998; tourism Growth in Malaysia, UPM Press.
- Internet Telecommunication Union (2012).World Telecommunication/ICT Indicators Database.
- Chiang, I. p., &Yi-Shiang, L., (2012).Exploring the Key Success Factors of Mobile Commerce in Taiwan," in Advanced Information Networking and Applications Workshops (WAINA), 2012 26th International Conference, 369-374.
- Idc.com (2012). Apple's iPhone Dethroned at the High-End in 2Q12 While Smartphones Set to Surpass Feature Phones in Malaysia by 2014, Says IDC -

prMY23691012.[online]Availableat:http://www.idc.com/getdoc.jsp?contain erId=prMY23691012#.UWZw9KK17Sg[Accessed: 11 Apr 2013].

Jinsong, G., Jinhui, X., Zibo, Z. & Zhuojun, L. (2008). Customer Satisfaction Evaluation for Mobile Commerce Based on Fuzzy Comprehensive Evaluation in Electronic Commerce and Security, 2008 International Symposium, 679-682.

- Johnston, R., & Mehra, S. (2002). Best-practice complaint management. *Academy of Management Journal*, 16(4), 145-154.
- JuYeong, L., Woo Hyun, K. &Chae Rhee, K., (2011) Measuring service quality and customer satisfaction in online trading services on smart phones in Communication Software and Networks (ICCSN), 2011 IEEE 3rd International Conference,485-489.
- Choi, J., Seol, H., Lee, S., Cho, H. & Park, Y. (2008). Customer satisfaction factors of mobile commerce in Korea. *Internet Research*, 18, 313-335.
- Johnson, M.D., Gustaffson, A., Andreassen, T.W., Lervik, L. & Cha, J. (2001). The evolutionand future of national customer satisfaction index models, *Journal* of EconomicPsychology, 22(2), 217-45.
- Jukic, N., Sharma, A., Jukic, B., &Parameswaran, M. (2002).M-commerce: Analysis of impact on marketing orientation.*Information Resources Management Association International Conference, Seattle, WA*.
- Kaapu, T. (2005). The concept of information privacy in e-commerce: A phenomenographical analysis of consumers' views. Conference Paper IRIS'28, Kristiansand, Norway.
- Klie, L. (2011). Hotels go mobile for a better stay. Customer Relationship Management, 15, 15-15.
- Kasavana, M., Hotel business review(2013) Mobile Technologies and the Hospitality Industry: Creating a Mobile Strategy. [online] Available at: http://hotelexecutive.com/business_review/2874/mobile-technologies-andthe-hospitality-industry-creating-a-mobile-strategy [Accessed: 24 Mar 2013].
- Kannan, P. K., Chang, A.-M., &Whinston, A.B. (2001) Wireless commerce: Marketing issues and possibilities.In Proceedings of the 34th Hawaii International Conference on System Sciences, Hawaii.
- Lee, K. C. &Chung ,N. (2009). Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective,*Interacting with Computers*, 21(385-392).
- Khan, a. h. a. h.(2013).Factors Influencing Of Tourist Loyalty: A Study on Tourist Destinations in Malaysia.

Kotler, P.(2000), Marketing Management. 10th edn., New Jersey, Prentice-Hall.

- Kuo, Y.-F., Wu, C.-M.& Deng, W.-J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services, *Computers in Human Behavior*, 25, 887-896.
- Lin, H.-H. & Wang, Y.-S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information & Management*, 43, 271-282.
- Liao, C., Palvia, P., & Chen, J.-L. (2009). Information technology adoption behaviorlife cycle: Toward a technology continuance theory (TCT). *International Journal of Information Management*, 29(4), 309–320.
- Lee, Y.J. (2003), Service Marketing, Hakhyun, Seoul.
- Lin,J.-b., (2011).Research on consumer trust and satisfaction in mobile commerce in Management Science and Engineering (ICMSE), 2011 International Conference, 47-51.
- Liljander, V., Gillberg, F., Gummerus J., & van Riel, A. (2006) Technology readiness and the evaluation and adoption of self-service technologies. *Journal of Retailing and Consumer Services*, 13(3), 177-191.
- Liljander, V., Polsa, P. and Forsberg, K. (2007) Do mobile CRM services appeal to loyalty program customer, *International Journal of E-business Research*, 3(2), 24-40.
- Mark N. Frolick& Lei-Da Chen (2004): Assessing M-Commerce Opportunities, Information Systems Management, 21(2), 53-61.
- Mason J. (1996) Linking qualitative and quantitative data analysis in Bryman A and Burgess RG (eds) *Analyzing Qualitative Data*, Routledge, London.
- Mostefaoui, S. K., Faci, N. & Maamar, Z.(2011) S-commerce: Injecting social elements into m-commere. Telecommunication in Modern Satellite Cable and Broadcasting Services (TELSIKS), 2011 10th International Conference on, 5-8 Oct,351-356.
- MGM Mirage (2011), MGM Resorts International, January, available at: www.mgmresorts.com/mobile/mgm_grand.aspx (accessed June 5, 2011).
- Nysveen, H., Pedersen, P. E., &Thorbjørnsen, H. (2005).Intentions to use mobile services: Antecedents and cross-service comparisons.*Journal of the Academy of Marketing Science*, 33(3), 330-246.

- NQRC (1995), American Consumer Satisfaction Index Methodology Report, University of Michigan Business School, Ann Arbor, MI.
- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retailsettings. *Journal of Retailing*, 57(3), 25–48.
- Pura, M. (2005).Linking perceived value and loyalty in location-based mobile services.*Managing Service Quality*, 15(6), 509-538.
- Pinsonneault, A., & Kraemer, K. L (1993).Survey research methodology in managementinformation systems: An assessment.*Journal of Management Information Systems*. 10(2): 75-105.
- Play.google.com (2013) GENTING Android Apps on Google Play. [online] Availableat:https://play.google.com/store/apps/details?id=com.genting.rwge nting&hl=en[Accessed: 11 Apr 2013].
- S.G Naoum,(1998). Dissertation Research and Writing for Construction Students. Butterworth-Heinemann, Oxford, UK.
- Shankar, V., Smith, A. K., &Rangaswamy, A.(2002). Customer satisfaction and loyalty in online and offline environments.*International Journal of Research in Marketing*, 20(2), 153-175.
- Rust, R.T., Cooil, B., (1994). Reliability measures for qualitative data: theory and implications, *Journal of Marketing Research* 31 (1), 1–14.
- Siau, K., Lim, E., &Shen, Z. (2001).Mobile commerce: Promise, challenges, and research agenda.*Journal of Database Management*, 12(3), 112-120.
- Sugai, P. (2005). Mapping the mind of the mobile consumer across borders—An application of the Zaltman metaphor elicitation technique. *International Marketing Review*, 22(6), 641-657.
- Sudipta, K. S. & Sarat, L. (2010). Cultural Tourism In Malaysia In The Perspective Of Indian Tourists: A Study. *Revista de turism-studii si cercetari in turism*, 48-53.
- SerkanAydin, GökhanÖzer,(2005) National customer satisfaction indices: an implementation in the Turkish mobile telephone market, *Emerald*, 23.
- Straub, D. W., Boudreau, M.-C., &Gefen, D. Validation guidelines for IS positivist

research. Communications of the AIS. 13(2), 380-427.

- The Star Online (2013) Hotel app a big hit with Malaysians. [online] Available at: http://thestar.com.my/metro/story.asp?file=/2013/1/22/central/12593735&se c=central [Accessed: 28 Mar 2013].
- Tiwari, R., Buse, S. & Herstatt, C. (2008). From Electronic to Mobile Commerce: Technology Convergence Enables Innovative Business Services. *Research project*, Hamburg University, Germany, retrieved on.
- Tsalagidou, A., Veijalainen, J., &Pitoura, E. (2000).Challenges in Mobile Electronic Commerce.In Proceedings of IeC2000.3rd International Conference on Innovation through E-Commerce.ManchesterUK, Nov. 14th-16th.
- Turban, E., King, D., Lee, J., Warkentin, M.& Chung, H. M. (2002). Electronic commerce, a managerial perspective. London, Prentice Hall.
- Turel, O. &Serenko, A. (2006) Satisfaction with mobile services in Canada: An empirical investigation, *Telecommunications Policy*, 30, 314-331.
- Varshney, U., & Vetter, R. (2002). Mobile commerce: Framework ,applications and networking support. *Mobile Network and Applications*, 7(3), 185-198.
- Walker, R. H., Craig-Lees, M., Hecker, R., & Francis, H. (2002). Technologyenabled service delivery. An investigation of reasons affecting customer adoption and rejection. *International Journal of Service Industry Management*, 13(1), 91-106.
- Wang ,Y.-S. & Liao, Y.-W. (2007) The conceptualization and measurement of mcommerce user satisfaction, *Computers in Human Behavior*, 23, 381-398.
- Wei, J., &Ozok, A. (2005). Development of a web-based mobile airline ticketing model with usability features. *Industrial Management & Data Systems*, 105(9), 1261-1277.
- Winer, R. S. (2001). A framework for customer relationship management. *California Management Review*, 43(4), 89-105.
- Ware, L.C. Wireless Update Slow and Steady Progress, CIO, September 30, (2002) .Available at <u>http://www2.cio.com/research/surveyreport.cfm?id=36</u>.
- Worthen, B. When Wireless Works, Computerworld, December 4, (2002). Available at<u>http://www.computerworld.com/</u>mobiletopics/mobile/story/0,10801,76397 ,00.html.
- Worthen, B. Will You Still Love It Tomorrow, *CIO*, October 15, (2001). Available at http://www.cio.com/archive/101501/tomorrow.html.

- Yang, X., Tian, P., & Zhang, Z. (2000). A comparative study on several national customer satisfaction indixes (CSI). Retrieved July 4, 2008, from<u>http://www.jgxysx.net/DAOM/114_XiaomingYang.pdf</u>.
- Yonghee, S., Hyori, J. &Munkee,C. (2006) Analysis of the Consumer Preferences toward M-Commerce Applications Based on an Empirical Study, in Hybrid Information Technology, 2006. ICHIT '06.*International Conference*, 654-659.
- Zairi, M., (2000) Managing customer satisfaction: a best practice perspective, *The TQM Magazine*, 12 (6), 389-494.
- Zhang,H.-m.(2008). Mobile commerce website selection base on fuzzy set theory and TOPSIS in Management Science and Engineering, 2008.ICMSE 2008.15th Annual Conference Proceedings, *International Conference*, 72-77.
- Zhao, L. Lu Y., Zhang, L., &Chau, P. Y. K. (2012) Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model, *Decision Support Systems*, 52, 645-656.
- Zhiyu C., Tao Z. (2008) Examining the Determinants of Mobile Commerce User Repurchase Behavior, in Wireless Communications, Networking and Mobile Computing, 2008. WiCOM '08.4th International Conference on, 1-4.