

# The Analysis of Antecedents of Customer Loyalty in the Australian Mobile Telecommunication Market

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**Keywords:** Customer Loyalty, SEM, Australia, Marketing Mix Factors.

**Abstract:** Marketing mix factors such as price product value, facilitating conditions, and social influence; and factors such as customer satisfaction, customer experience, habit, hedonic motivation, performance expectancy, effort expectancy are the major antecedents of customer loyalty. As, loyal customers may buy more services and have a positive word-of-mouth effect. Moreover, it is evident from previous literature that the cost of selling service to new customers is much higher than the cost of retaining existing customers. Furthermore, it is evident fact from telecommunication industry ombudsman Australia reports that companies are still losing customers at a formidable rate. In this context, the main aim of this paper is to examine the relationships between these factors and customer loyalty, and the relationships among these factors in the Australian mobile service scenario. Data for this study was obtained from 1,985 mobile phone users in Australia via online questionnaire using a marketing company Research Now. The data was analysed by structural equation modelling (SEM) to test all the relationships between variables in the model. The findings of this research focus on the measurement model fit part only. The analysis results showed that perceived customer experience is a necessary but not sufficient condition for customer loyalty. In order to generalize the findings from this research, this research model should be used in different service industries with different geographic samples. The contribution of this research is to model all the relationships between customer loyalty and its antecedents, and to test these relationships simultaneously. In this paper, the effects of all the factors on customer loyalty are tested simultaneously via structural equation modelling (SEM) and this paper only focuses on model fit.

## 1 INTRODUCTION

There is a significant importance of customer loyalty in service industries (Caruana, 2002; Rai and Srivastava, 2012). Customer loyalty has been viewed as the strength of the relationship between an individual's relative attitude and repeat patronage. The technology has been evolved with the passage of time and service providers are doing network upgrades. There is a furious competition among service providers for more competitiveness and customers' acquirement. According to Telecommunication industry reports TIO (2014), customers are making complaints about network service, quality, contract, customer service and billing issues. The service quality has an impact on customer satisfaction and customer loyalty (Bhatti, 2016). Customer satisfaction is measured by a tool called Net Promoter Score (NPS) in service industry. TIO reports that NPS which is used to measure the

customer satisfaction for many service providers has been dropped dramatically down, because of it there is substantial increase in customer service complaints. This study evaluates the antecedents which can influence the customer loyalty in mobile telecommunication sector. The theoretical framework for this study is based on unified theory of acceptance and use of technology (UTAUT 2), marketing mix theory and expectation confirmation theory (ECT). The identified factors such as customer experience, customer satisfaction, effort expectancy, performance expectancy, facilitating conditions, social influence, price value, habit and hedonic motivation are derived from literature review and previous studies (Brown and Venkatesh, 2005; Escobar-Rodríguez and Carvajal-Trujillo, 2013, 2014; Venkatesh et al., 2003; Venkatesh et al., 2012; Wirtz et al., 2006). The research instrument has been developed for this study with 65 items. The online survey is conducted with a 364 respondent. The analysis for this study has been

done in R-studio programming tool using Lavaan package partial for structural equation modelling analysis. This study will give future directions to businesses and researchers. This study will help in formation of a theoretical model which can be implemented in service industries.

In previous Literature, loyalty has been discussed in different ways, there are two prime approaches: behavioural and attitudinal approaches (Dekimpe et al., 1997; Dick and Basu, 1994). Below mentioned are the definitions from past studies. Another study Oh (1995) from past explores the three broad categories of customer loyalty: the behavioural approach, the attitudinal approach and the integrated approach. The integrated approach contains both attitudinal and behavioural approaches. In this study, the focus of the research is only at attitudinal approach. The following tables presents some key definition from previous literature.

Table 1: Loyalty Definitions in Literature.

Customer Loyalty	References
Those who rebought a brand, considered only that brand, and did no brand-related information seeking.	(Newman and Werbel, 1973); Oliver (1999,p.34)
It is defined as "repeat purchase frequency" or "relative volume of same brand purchasing".	(Telli,s 1988)
Loyalty has been defined from attitudinal perspective as well. Attitudinal loyalty includes cognitive, affective, and conative aspects.	(Oliver, 1997,p.392); Oliver, (1999,p.34)
Oliver (1997, p. 392) proceeds to describe the consumer who "fervently desires to rebuy a product or service and will have no other."	(Oliver, 1997,p.392)
Customer loyalty is a buyer's affection or deep association to a product, facility, image, or company.	(Oliver, 1999)

Oliver (1999, p.36) discussed four phases of loyalty development.

- First, loyalty in the cognitive phase is entirely based on either prior knowledge or experience-based information about a brand.
- Second, loyalty in the affective phase is a liking or attitude toward a brand. Moreover, loyalty is defined as cumulatively satisfying usage occasions, it implies feelings or association towards a brand.
- Thirdly, conative loyalty is defined as customer's behavioural intention to keep on purchasing a product in the future.
- The final stage of loyalty phases in which motivated intention is changed into readiness to act. This approach of action loyalty is linked with behavioural approach.

For this study, the definition of customer loyalty is "A deeply held commitment to rebuy or re-patronise a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Oliver, 1997,p.392). The service has been studied intensively worldwide in different areas and the unique characteristics required for customer orientation are very well investigated in previous studies (Harris and Goode, 2004; Oliver, 1997, 1999; Oliver and Swan, 1989; Rai and Srivastava, 2012). The major concepts for customer loyalty, customer satisfaction, service quality, and customer complaints have been highlighted in many past studies (Harris and Goode, 2004; Mano and Oliver, 1993; Oliver, 1997, 1999; Oliver et al., 1988; Oliver and Richard, 1981; Oliver and Richard, 1993; Oliver, 1977, 1980; Oliver, RL and Bearden 1985; Oliver and DeSarbo, 1988; Oliver and Swan, 1989; Taylor and Baker, 1994). The role of customer loyalty gains more popularity when it is applied in customer service context due to the direct human involvement. The characteristics of service durability, reliability, service delivery, and customer service etc. enhance the integrity between service and human relationship. Customer loyalty is very critical for any business or service. Due to the continues evolving of services, and marketing competitiveness, companies are now focusing on the significance of human involvement in form of customer loyalty and retention. Customer loyalty has been including as the strategic objective in decision making process due to the competition with other companies (Rai and Srivastava, 2012). Customer loyalty has been seen as a source of competitive advantage (Bharadwaj et al., 1993). Moreover, this study focuses on the customer relative attitudes and attitudinal approach as defined by Dick and Basu (1994) while defining different approaches towards loyalty. In this study, the determinants of customer loyalty as highlighted and derived from behavioural intention are discussed. The relationship needs to be tested in mobile telecommunication service context.

In telecommunication industry, the main barometer for customer satisfaction measurement is Net Promoter Score (NPS) (Ozlem, 2009; Prajogo et al., 2014; Reichheld et al., 1989; Reichheld and Teal, 1996). The main theme of NPS is based on feedback from customers include the time it took to complete requests, network reliability and coverage and customer service issues. Moreover, the feedback on customers' activation episodes reflect issues with mobile companies prepaid mobile service and the increase in cycle time to activate. This increase

coincides with a number of changes to IT systems with flow-on impacts to the way that mobile companies inform customers via Keep Me Informed (KMIs) (Ramli, 2015). Moreover, in prepaid mobile services, the key areas of focus are to improve the digital user experience, increase the number of Interactive voice response (IVR) self-help options for customers and the improvement of activation cycle times and system stability. Clearly, mobile services network stability can help in improving the customer experience (TIO, 2014).

Customer acquisition which is acquiring a new customer is most costly when compared to retaining existing customers (Edward and Sahadev, 2011). The consequent increase in business revenue is directly related to the customer behavioural intention to stay loyal and customer repurchase behaviour (Edward and Sahadev, 2011; Santouridis and Trivellas, 2010). Every research has several research boundaries, hence for this study, the theoretical framework focusses on attitudinal perspective of behavioural intention which is customer loyalty. Technology is evolving and changes in network along with service upgrade can impact services (Bhatti, 2016). Moreover, it is evident empirically in previous studies (Islam and Rima, 2013; Kuo and Yen, 2009) that technology change affects the customer loyalty. This research will investigate the lack of customer loyalty issue in the mobile service market in Australia. According to previous studies (Aydin and Ozer, 2005; Aydin et al., 2005), it is empirically tested that customers that are not loyal will spread bad word of mouth and company will be in loss.

## 2 THEORETICAL FRAMEWORK

The term customer loyalty is a relatively a common phenomenon used in marketing and business studies. The extant body of literature available in field of IT/IS adoption extensively used empirical work of Theory of reasoned action (TRA) (Ajzen and Fishbein, 1977; Fishbein and Ajzen, 1975; Warshaw and Davis, 1985), Technology acceptance model TAM (Davis 1989), Theory of planned behaviour TPB (Ajzen, 1991), Innovation diffusion theory IDT (Roger, 1995) and Technology adoption model 2 (TAM2) (Venkatesh and Davis, 2000). Moreover, these studies have been extensively used to understand the technology adoption process in various information system, information technology and business studies (Benlian et al., 2011; Brown and Venkatesh, 2005; Hanafizadeh et al., 2014; Hong and Tam, 2006; Hsu et al., 2007; Pagani, 2004).

Although, there are many factors such as demographics, research area, socio-economic profile of the participants which can impact analysis, validity of robustness and predictive ability of these models. Similarly, unified theory of acceptance and use of technology (UTAUT) Venkatesh et al., (2003) presents the four factors such as performance expectancy, effort expectancy, social influence and facilitating conditions effecting the behavioural intention and user actual behaviour. The UTAUT model is combination of eight theories mentioned above. Furthermore, a revised extension UTAUT 2 model is proposed by researcher Venkatesh et al., (2012) which imputes the pricing, habit and hedonic motivation factors in the UTAUT model. The basic motivation of this study is to propose a synthesized single framework which improves parsimony, descriptive power, and predictive ability and to overcome the basic limitations of the existing models. In the current model UTAUT 2 is only focusing on user behaviour and this model doesn't discuss the customer satisfaction and customer experience impact on customer behavioural intention to stay loyal. It is therefore, imperative to understand the customer loyalty of mobile telecommunication service in an integrated framework in the back drop of an extension of established IT/IS adoption theories and specific dimensions required in view of inherent characteristics of mobile services.

In previous studies (Benlian et al., 2011; Liu, 2012; San Martín and Herrero, 2012; Shin, 2009; Turel et al., 2007; Zhou and Lu, 2011), major theories such as theory of planned behaviour, technology acceptance model, unified theory of acceptance and use of technology, SERVQUAL model, and social influence theory are used to address user adoption, behavioural intention to stay issues in service industries. In this study, the focal point of study is the attitudinal perspective of behavioural intention. The relationships between customer experience and customer loyalty; and customer satisfaction and customer loyalty are conceptualised by using the theoretical underpinning of customer expectation confirmation theory. As, a customer's experience can be defined as the expectation gap between the level of customer experience that the customer thinks they should be getting (built up by marketing promises and other experiences) and the level they actually receive (Millard, 2006). Moreover, the relationship among marketing factors such as product price value, physical conditions and customer loyalty are conceptualised with the support of unified theory of acceptance and use of technology. The constructs such as product price value, facilitating conditions,

social influence and hedonic motivation are contextualised in the area of the mobile service. Therefore, marketing concepts help in supporting the argument and shaping the theoretical underpinning for this research framework. Each theory in this framework is covering one phenomenon of each aspect i.e. marketing mix and product association, behavioural aspect covered by UTAUT 2, and psychological aspect such as customer experience and customer satisfaction are underpinned by customer expectation confirmation theory (ECT).

This research project aims to explore the factors that affect customer loyalty in the telecommunication sector of Australia. The main objective of this study is to develop a framework to investigate the factors affecting customer loyalty in the telecommunication service industry. To achieve this objective, several questions have been formulated, as follows:

- 1- What are the factors that influence the customer loyalty in the Australian telecommunication sector?
- 2- To what extent do these factors affect customer loyalty?
- 3- What is the influence of age, gender and length of experience as a moderating factor between antecedents and dependent variable in the extended Unified Theory of Acceptance and Use of Technology model?

In order to address the research questions, the following specific objectives are formulated.

#### **Aims**

- This study will explore the factors which can affect customer loyalty.
- This study framework will be used by telecommunication business managers and business units in formulating their business plans for sustainable revenue.
- This study framework will help the companies in improving their customer base.
- This study framework will significantly contribute by empirically testing a new model for customer repurchase behaviour.

#### **Objectives**

- To determine the significance of these factors on customer loyalty.
- To investigate the determinants of repurchase behaviour in the Australian telecommunication sector.

## **2.1 Research Framework**

The model is amended to suit the context of this stu-

dy. The UTAUT 2 model also fulfils the requirement of marketing mix factors such as product, price, plan, place, process and promotion for this study. This model also supports the influence of social influence through social networking using marketing and advertising tools for the promotion of product and services. The revised model will also consider the influence of moderators that are thought would influence the three direct determinants: gender, age and the length of experience.

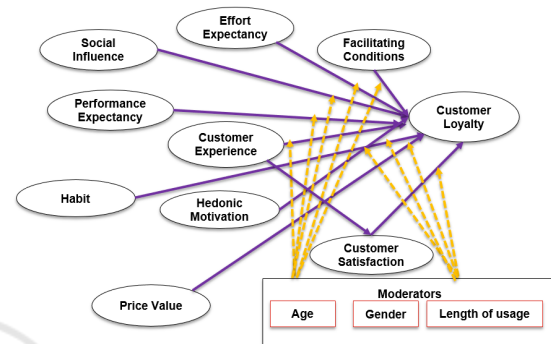


Figure 1: Loyalty Framework (UTAUT 2 Extension).

The above discussion would lead to the following hypothesis:

- H1: Facilitating conditions has a positive impact on customer loyalty.
- H2: Effort expectancy has a positive impact on customer loyalty.
- H3: Performance expectancy has a positive impact on customer loyalty.
- H4: Social influence has a positive impact on customer loyalty.
- H5: Price value has a positive impact on customer loyalty.
- H6: Habit has a positive impact on customer loyalty.
- H7: Hedonic Motivation has a positive impact on customer loyalty.
- H8: Customer satisfaction has a positive impact on customer loyalty.
- H9: Customer experience has a positive impact on customer loyalty.
- H10: Customer experience has a positive impact on customer satisfaction.
- H11: Facilitating conditions has a positive impact on customer loyalty.
- H12-H21: The moderating impact of age, gender and length of experience on above mentioned relationships between independent and dependent variables.



### 3 RESEARCH METHODOLOGY

This research is based on positivist paradigm with quantitative method. It is based on hypothetico-deductive quantitative approach. The positivist methodology is based on the experiments, hypothesis testing, validity, verifications and quantitative methods of study. The interpretive approach considers reality as a relative term; it focuses on subjectivity of social issue with interpretative dialectical method (Bryman and Bell, 2011). This study investigates the relationship between customer loyalty, customer satisfaction, customer experience and its measure, hedonic motivation, habit, marketing mix factors such as product price value, facilitating conditions in the context of customer loyalty in mobile telecommunication industry using UTAUT. Research questions are derived from a literature review. This research focuses on all the impacts, whether technical or behavioural, which can influence customer loyalty. Quantitative method of study is adopted for this research. In this study, in order to achieve the research objective, a quantitative method is employed by utilizing an online questionnaire. In this study, the participants are recruited from all the states in Australia by using the marketing company's Research Now panel. It strengthens the result that can be obtained from a certain population. Thus, the costs of distributing, collecting and capturing questionnaires can be small (Sanchez-Acenjo, 2014). Brand (2003) explained that sometimes this method can be costly and time consuming. This method can provide a narrative which offers better and meaningful understanding of behaviours (VanderStoep and Johnson, 2008). However, the results of analysis can be interpretative and can introduce potential bias while data gathering or during data analysis (Brand, 2003). The survey is done in three phases as mentioned below.

#### Survey 1: Pre-test

The primary aim of the pre-test is to test and validate the various scales that are used for the final test of model. Survey 1 is conducted from participation of five academics and five content experts. Item screening is also conducted in this step using the interrater reliability.

#### Survey 2: Pilot Test

The primary aim of the pilot test is to examine the responses of complete questionnaire and validate various scales that are used for the final test of model. This test also helps to test that participant can understand wording, grammar and context of the study. At this stage, participant's feedback can be

incorporated in the actual study. Survey 2 is conducted from a participation of 10-15 mobile service users in Australia.

#### Survey 3: Main Study

In the main study people living in Australia are invited to participate by using a marketing company Research Now. The target population for the main study is approximately 2000, with an expected response 364 participants (Uma and Roger, 2003). For data analysis envisaged in this study, a minimum sample size of 320 is desirable. Data is analysed using Structural Equation Modelling with R- Studio. The finalised item for the research instruments for each construct are as follow in Table 2.

Table 2: Research Instrument.

Variables	No. item	Source
Facilitating Conditions	7	(Boontarig et al., 2012; Venkatesh et al., 2012)
Performance Expectancy	6	(Boontarig et al., 2012; Shao and Siponen, 2011; Venkatesh et al., 2012)
Effort Expectancy	7	(Hung and Chang, 2005; San Martín and Herrero, 2012; Venkatesh et al., 2012)
Social Influence	6	(Venkatesh et al., 2003; Venkatesh et al., 2012)
Hedonic Motivation	7	(Chang et al., 2009; Venkatesh et al., 2012)
Habit	6	(Lin and Wang, 2006; Venkatesh et al., 2012)
Price Value	5	(Baker et al., 2000; Venkatesh et al., 2012)
Customer Satisfaction	6	(Wang et al., 2004; Zhou and Lu, 2011)
Customer Experience	9	(Wang et al., 2004; Wangpipatwong et al., 2008)
Customer Loyalty	5	(Chang et al., 2009; Kuo and Yen, 2009; Ray and Chiagouris, 2009; Zhou and Lu, 2011)
Total	64	

### 4 DATA ANALYSIS

There were 364 respondents to questionnaire survey after data cleaning i.e. removal of unengaged responses. There are 184 (50.5 percent) of them male and 180 (49.5 percent) female in this study.

The respondents are in age range of 18-25 (15.1 percent), 26-35(18.1 percent), 36-45(17.6 percent), 46-55(17 percent), 56-64(16.2 percent) and >65 (15.9 percent). The majority of respondents are with annual income \$18200-\$37000 (20 percent) and minority of respondents with the annual income \$180000 and over in the above-mentioned figure.

The respondent's employment status is described in this survey as self-employed (7.1 percent), employed (54.9 percent), unemployed (7.4 percent), volunteer (1.1 percent), student (6.3 percent), retired (20.1 percent) and unable to work (3 percent). The majority of respondents are holders of bachelor degree, diploma or associate diploma and high school graduate. The minority of respondents are holders of certificate IV or below (14 percent) and 0.8 percent never attended school.

#### 4.1 Evaluation of the Measurement Model

The measurement model (confirmation factor analysis or CFA) specifies the relationships that explain how measured variables represents a construct (Hair, 2010). It was assessed with CFA using R-studio programming tool to empirical test the convergent and discriminant validity. In the confirmation factor analysis, the convergent and discriminant validity depend upon three indicators such as the item reliability of each measure, reliability of the construct, and average variance extracted (AVE). According to Hair (2010), constructs have convergent validity when the composite reliability (CR) exceeds the threshold of 0.70 and the average variance extracted (AVE) is above the threshold value of 0.5. The below mentioned table 3 shows that all items have item loading higher than 0.7 except few items such as one item from facilitating condition FC-3, one item from habit HT4, three items from customer service and one item from customer satisfaction (CS-6). These items are dropped. All the AVE's after removal of these items were above 0.5 and all the CRs were above 0.7. Hence, the results support the convergent validity of the scales (Straub et al., 2004). Below mentioned table 3 shows the CR and AVE values.

Table 3: Construct Validity and Discriminant Validity.

Constructs	CR <sup>a</sup>	AVE <sup>b</sup>
Customer Satisfaction (CS)	0.939	0.721
Performance Expectancy (PE)	0.944	0.737
Habit (HT)	0.793	0.491
Customer Experience (CE)	0.909	0.626
Price Value (PV)	0.916	0.732
Social Influence (SI)	0.939	0.721
Customer Loyalty (CL)	0.874	0.582
Facilitating Conditions (FC)	0.879	0.721
Hedonic Motivation (HM)	0.901	0.605
Effort Expectancy (EE)	0.91	0.593

For the model, measurement model fits parameters which helps to assess the models' goodness of fit index and other parameters such as Chi-square ( $\chi^2$ ), CFI, TLI, RMSEA, and SRMR. As per below mentioned references, the overall model fit well. Therefore Table 3 shows the measurement model parameters and m in the below mentioned table 4 represents the number of items.

Table 4: Measurement Model Parameters.

Fit Indices	Value	Reference	Range m>=30
GOF Chi-Square	1.69	(Hair et al., 2010)	P<3.
RMSEA	0.02	(Hair et al., 2010)	Values<0.07
CFI	0.979	(Hair et al., 2010)	Above 0.90
TLI	0.967	(Hair et al., 2010)	Above 0.90
SRMR	0.037	(Hair et al., 2010)	0.08 or less

The next step after confirmatory factor analysis is the assessment of the structural path model and then hypothesis testing. This paper is only focusing on the measurement model fit. So, the next part of the analysis will be hypothesis testing.

## 5 CONCLUSIONS

The purpose of this study was to investigate the factors affecting the customer loyalty and the use of mobile services in Australia. The findings of this study have explored interesting findings. First, it confirms that model is reliable and valid for further analysis. Second, with respect to the extended version of UTAUT 2 model, the model fit relatively well as all parameters are in adequate acceptable range. The results of measurement models show that model fits quite well. The next step is to test the structural model followed by hypothesis testing. This research helps in the designing of the theoretical framework with the underpinned theories and concepts. This research model is the extension of user behaviour and adoption theories. In this research, model is based on different assumptions which are discussed in theory building process and how these assumptions help in the research framework development. This model contributes theoretically in better understanding behavioural intention and customer loyalty framework in telecommunication context.

## 6 FUTURE STUDIES AND LIMITATION

This model can be tested in other service industries such as airline, energy and cloud computing research etc. This model can be tested with some other geographical samples in other countries. Moreover, this study is based on the quantitative data analysis as data was collected from 1,985 respondents with 364 valid responses, so this work could be extended using qualitative data analysis technique. Companies can be approached after ethics approval and interview could be conducted in future studies. There was a limitation in this study that company database access was not available for net promoter score (NPS) quarterly analysis for each mobile service. In future research, companies' customer database can be used for further analysis which can lead to the development of some mathematical and predictive model for big data analytics. Thus, future research can be built on this model of the UTAUT 2 extended model in different countries and different service areas.

## REFERENCES

- Ajzen, I 1991, 'The theory of planned behavior', *Organizational behavior and human decision processes*, vol. 50, no. 2, pp. 179-211.
- Ajzen, I and Fishbein, M 1977, 'Attitude-behavior relations: A theoretical analysis and review of empirical research', *Psychological bulletin*, vol. 84, no. 5, p. 888.
- Aydin, S and Ozer, G 2005, 'The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market', *European Journal of Marketing*, vol. 39, no. 7/8, pp. 910-25.
- Aydin, S, Özer, G and Arasil, Ö 2005, 'Customer loyalty and the effect of switching costs as a moderator variable', *Marketing Intelligence and Planning*, vol. 23, no. 1, pp. 89-103.
- Baker, A, D, Crompton and L, J 2000, 'Quality, satisfaction and behavioral intentions', *Annals of tourism research*, vol. 27, no. 3, pp. 785-804.
- Benlian, A, Koufaris, M and Hess, T 2011, 'Service Quality in Software-as-a-Service: Developing the SaaS-Qual Measure and Examining Its Role in Usage Continuance', *Journal of Management Information Systems*, vol. 28, no. 3, pp. 85-126.
- Bharadwaj, SG, Varadarajan, PR and Fahy, J 1993, 'Sustainable competitive advantage in service industries: a conceptual model and research propositions', *The Journal of Marketing*, pp. 83-99.
- Bhatti, H, Abareshi, A. and Pittayachawan, S. 2016, 'An Empirical Examination of Customer Retention in Mobile Telecommunication Services in Australia', *In Proceedings of the 13th International Joint Conference on e-Business and Telecommunications (ICETE 2016)*, vol. 2, no. pages 72-77.
- Boontarig, W, Chutimaskul, W, Chongsuphajsiddhi, V and Papasratorn, B 2012, 'Factors influencing the Thai elderly intention to use smartphone for e-Health services', paper presented to Humanities, Science and Engineering Research (SHUSER), 2012 IEEE Symposium on.
- Brand, M 2003, 'Market intelligence: Making market research work for microfinance', *Accion's InSight Series*, no. 7.
- Brown, SA and Venkatesh, V 2005, 'Model of adoption of technology in households: A baseline model test and extension incorporating household life cycle', *MIS quarterly*, pp. 399-426.
- Bryman, A and Bell, E 2011, *Business Research Methods 3e*, Oxford university press.
- Caruana, A 2002, 'Service loyalty', *European Journal of Marketing*, vol. 36, no. 7/8, pp. 811-28.
- Chang, Hsin, H, Wang, Yao-Hua and Yang, W-Y 2009, 'The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value', *Total Quality Management and Business Excellence*, vol. 20, no. 4, pp. 423-43.
- Davis, FD 1989, 'Perceived usefulness, perceived ease of use, and user acceptance of information technology', *MIS quarterly*, pp. 319-40.
- Dekimpe, MG, Steenkamp, J-BE, Mellens, M and Abeele, PV 1997, 'Decline and variability in brand loyalty', *International Journal of Research in Marketing*, vol. 14, no. 5, pp. 405-20.
- Dick, AS and Basu, K 1994, 'Customer loyalty: toward an integrated conceptual framework', *Journal of the academy of marketing science*, vol. 22, no. 2, pp. 99-113.
- Edward, M and Sahadev, S 2011, 'Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage', *Asia Pacific Journal of Marketing and Logistics*, vol. 23, no. 3, pp. 327-45.
- Escobar-Rodríguez, T and Carvajal-Trujillo, E 2013, 'Online drivers of consumer purchase of website airline tickets', *Journal of Air Transport Management*, vol. 32, no. 0, pp. 58-64.
- 2014, 'Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model', *Tourism Management*, vol. 43, no. 0, pp. 70-88.
- Fishbein, M and Ajzen, I 1975, *Belief, attitude, intention and behavior: An introduction to theory and research*.
- Hair, JF 2010, 'Multivariate data analysis'.
- Hanafizadeh, P, Behboudi, M, Koshksaray, AA and Tabar, MJS 2014, 'Mobile-banking adoption by Iranian bank clients', *Telematics and Informatics*, vol. 31, no. 1, pp. 62-78.
- Harris, LC and Goode, MMH 2004, 'The four levels of loyalty and the pivotal role of trust: a study of online service dynamics', *Journal of Retailing*, vol. 80, no. 2, pp. 139-58.
- Hong, S-J and Tam, KY 2006, 'Understanding the adoption

- of multipurpose information appliances: the case of mobile data services', *Information systems research*, vol. 17, no. 2, pp. 162-79.
- Hsu, C-L, Lu, H-P and Hsu, H-H 2007, 'Adoption of the mobile Internet: An empirical study of multimedia message service (MMS)', *Omega*, vol. 35, no. 6, pp. 715-26.
- Hung, S-Y and Chang, C-M 2005, 'User acceptance of WAP services: test of competing theories', *Computer Standards and Interfaces*, vol. 27, no. 4, pp. 359-70.
- Islam, MB and Rima, AR 2013, 'Factors Affecting Customer Experience in Telecommunication Services and its Importance on Brand Equity: A Study on Telecommunication Companies in Bangladesh'.
- Kuo, Y-F and Yen, S-N 2009, 'Towards an understanding of the behavioral intention to use 3G mobile value-added services', *Computers in Human Behavior*, vol. 25, no. 1, pp. 103-10.
- Lin, H-H and Wang, Y-S 2006, 'An examination of the determinants of customer loyalty in mobile commerce contexts', *Information and Management*, vol. 43, no. 3, pp. 271-82.
- Liu, S 2012, 'The impact of forced use on customer adoption of self-service technologies', *Computers in Human Behavior*, vol. 28, no. 4, pp. 1194-201.
- Mano, H and Oliver, RL 1993, 'Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction', *Journal of Consumer Research*, pp. 451-66.
- Millard, N 2006, 'Learning from the 'wow' factor—how to engage customers through the design of effective affective customer experiences', *BT Technology Journal*, vol. 24, no. 1, pp. 11-6.
- Newman, JW and Werbel, RA 1973, 'Multivariate analysis of brand loyalty for major household appliances', *Journal of marketing research*, pp. 404-9.
- Oh 1995, 'An empirical study of the relationship between restaurant image and customer loyalty'.
- Oliver 1997, *Satisfaction: A behavioral perspective on the consumer*, Mc graw-Hill, NewYork, Mc graw-Hill, NewYork.
- 1999, 'Whence Consumer Loyalty?', *Journal of Marketing*, vol. 63, pp. 33-44.
- Oliver, ., R, DeSarbo and ., W 1988, 'Response Determinants in Satisfaction Judgments', *Journal of Consumer Research*, vol. 14, no. 4, pp. 495-507.
- Oliver and Richard 1981, 'Measurement and evaluation of satisfaction processes in retail settings', *Journal of Retailing*.
- Oliver and Richard. 1993, 'A conceptual model of service quality and service satisfaction: compatible goals, different concepts', *Advances in services marketing and management*, vol. 2, no. 4, pp. 65-85.
- Oliver, RL 1977, 'Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation', *Journal of Applied Psychology*, vol. 62, no. 4, p. 480.
- 1980, 'A cognitive model of the antecedents and consequences of satisfaction decisions', *Journal of marketing research*, pp. 460-9.
- Oliver, RL and Bearden, WO 1985, 'Disconfirmation processes and consumer evaluations in product usage', *Journal of business research*, vol. 13, no. 3, pp. 235-46.
- Oliver, RL and DeSarbo, WS 1988, 'Response determinants in satisfaction judgments', *Journal of Consumer Research*, pp. 495-507.
- Oliver, RL and Swan, JE 1989, 'Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach', *The Journal of Marketing*, pp. 21-35.
- Ozlem, A 2009, 'A Study to Determine the Effects of Customer Value on Customer Loyalty in Airline Companies Operating: Case of Turkish Air Travellers', *International Journal of Business and Management*, vol. 4, no. 6.
- Pagani, M 2004, 'Determinants of adoption of third generation mobile multimedia services', *Journal of interactive marketing*, vol. 18, no. 3, pp. 46-59.
- Prajogo, DI, McDermott, CM and Jayaram, J 2014, 'The role of technological intensity in services on the capability to performance relationships – An examination in the Australian context', *Journal of Engineering and Technology Management*, vol. 31, no. 0, pp. 58-72.
- Rai, AK and Srivastava, M 2012, 'Customer loyalty attributes: A perspective', *NMIMS management review*, vol. 22, pp. 49-76.
- Ramli, D 2015, 'Optus mobile subscriber base falls as Telstra, Vodafone step up competition', *smh*, Home Business. 13/08/2015.
- Ray, I and Chiagouris, L 2009, 'Customer retention: Examining the roles of store affect and store loyalty as mediators in the management of retail strategies', *Journal of Strategic Marketing*, vol. 17, no. 1, pp. 1-20.
- Reichheld, F, F, Sasser Jr and Earl, W 1989, 'Zero defections: quality comes to services', *Harvard business review*, vol. 68, no. 5, pp. 105-11.
- Reichheld, F and Teal, T 1996, 'The loyalty effect', *Harvard Business School Press, Boston*.
- Roger, E 1995, 'Diffusion of innovations, The Free Press, New York, NY'.
- San Martín, H and Herrero, Á 2012, 'Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework', *Tourism Management*, vol. 33, no. 2, pp. 341-50.
- Sanchez-Acenjo, C 2014, 'Habits and technology fit: a study of technology acceptance'.
- 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*, vol. 22, no. 3, pp. 330-43.
- Shao, X and Siponen, M 2011, 'Consumer acceptance and use of information technology: Adding consumption theory to UTAUT2'.
- Shin, DH 2009, 'Determinants of customer acceptance of multi-service network: An implication for IP-based technologies', *Information and Management*, vol. 46, no. 1, pp. 16-22.



- Straub, D, Boudreau, M-C and Gefen, D 2004, 'Validation guidelines for IS positivist research', *The Communications of the Association for Information Systems*, vol. 13, no. 1, p. 63.
- Taylor, SA and Baker, TL 1994, 'An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions', *Journal of Retailing*, vol. 70, no. 2, pp. 163-78.
- Tellis, GJ 1988, 'Advertising exposure, loyalty, and brand purchase: A two-stage model of choice', *Journal of marketing research*, pp. 134-44.
- TIO 2014, 'Telecommunications Industry Ombudsman 2014 Annual Report '.
- Turel, O, Serenko, A and Bontis, N 2007, 'User acceptance of wireless short messaging services: Deconstructing perceived value', *Information and Management*, vol. 44, no. 1, pp. 63-73.
- Uma, S and Roger, B 2003, 'Research methods for business: A skill building approach', *John Wiley and Sons Inc., New York*.
- VanderStoep, SW and Johnson, DD 2008, *Research methods for everyday life: Blending qualitative and quantitative approaches*, vol. 24, John Wiley and Sons.
- Venkatesh, V and Davis, FD 2000, 'A theoretical extension of the technology acceptance model: four longitudinal field studies', *Management science*, vol. 46, no. 2, pp. 186-204.
- Venkatesh, V, Morris, MG, Davis, GB and Davis, FD 2003, 'User acceptance of information technology: Toward a unified view', *MIS quarterly*, pp. 425-78.
- Venkatesh, V, Thong, JY and Xu, X 2012, 'Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology', *MIS quarterly*, vol. 36, no. 1, pp. 157-78.
- Wang, Y, Lo, H-P and Yang, Y 2004, 'An integrated framework for service quality, customer value, satisfaction: evidence from China's telecommunication industry', *Information Systems Frontiers*, vol. 6, no. 4, pp. 325-40.
- Wangpipatwong, S, Chutimaskul, W and Papasratorn, B 2008, 'Understanding citizen's continuance intention to use e-government website: A composite view of technology acceptance model and computer self-efficacy', *The electronic journal of e-government*, vol. 6, no. 1, pp. 55-64.
- Warshaw, PR and Davis, FD 1985, 'Disentangling behavioral intention and behavioral expectation', *Journal of experimental social psychology*, vol. 21, no. 3, pp. 213-28.
- Wirtz, J, Brah, S, Yanamandram, V and White, L 2006, 'Switching barriers in business-to-business services: a qualitative study', *International Journal of Service Industry Management*, vol. 17, no. 2, pp. 158-92.
- Zhou, T and Lu, Y 2011, 'Examining Postadoption Usage of Mobile Services From a Dual Perspective of Enablers and Inhibitors', *International Journal of Human-Computer Interaction*, vol. 27, no. 12, pp. 1177-91.