

FULL RELATIONSHIP BETWEEN E-SERVICE QUALITY, E-CUSTOMER
SATISFACTION AND E-LOYALTY IN INTERNET BANKING

ZOHREH BANG TAVAKOLI

A dissertation submitted in partial fulfilment of the
Requirements for the award of the degree of
Master of Management (Technology)

Faculty of Management
Universiti Teknologi Malaysia

JUNE 2013

This dissertation is dedicated to my beloved Emad who is the inspiration for my life and my study.

ACKNOWLEDGEMENT

First and foremost, I would like to express heartfelt gratitude to my supervisor **PROF. MOHD SHOKI BIN MD ARIFF** for his constant support during my study at UTM. He inspired me greatly to work in this project. His willingness to motivate me contributed tremendously to our project. I have learned a lot from him and I am fortunate to have him as my mentor and supervisor.

Besides, I would like to thank the authority of Universiti Teknologi Malaysia (UTM) for providing me with a good environment and facilities such as Computer laboratory to complete this project with software which I need during process supervisor. .

Last but not the least, I would like to express my deep sense of love to my parents for their unconditional support, my nephews Amirali and Sayna, my sisters Hedieh and Bahareh, my brother Amin, my dear friend Soheila and my husband Emad for his unquestionable love.

ABSTRACT

Information Technology has been develops a lot recently. Banking is a demand-driven industry due to different preferences such as providing customers efficient banking services internet should be taken into account as an important issue for banks to delivery financial services. In order to guarantee high rate of customer retention and decreasing costs for recruiting new customers, building loyalty in internet banking plays an important role. All banks try to retain their customers by making them satisfied with different services and offerings through delivering high quality of electronic service (e-SQ) hence, determining dimensions of e-SQ to meet customer needs in internet environment seems influential and significant. Modified, developed model for measuring the quality of online services consisting 7 dimensions with 30 items are used according to literature review and expert opinion. The items to measure customer satisfaction were taken from overall level of user satisfaction and is corresponds to the summary affective response or feeling of a customer in relation to her/his experience with all aspects of on online services. Five-item Behavioural Loyalty is used to measure the loyalty intentions construct. The quantitative research paradigm and a controllable convenient sampling procedure were implemented in the current research. The questionnaire distributed among customers of MEELAT bank which is a public banks in Iran. according to the result of factor analysis on modified theoretical model (instrument) the final version of the model (instrument) for measuring quality of online banking services were formed which includes five quality dimensions (efficiency, service performance, customer service, contact, site aesthetic) with total of 19 items . Based on the result of analysis it can be concluded that there is casual relationship between dimension of e-service quality, customer satisfaction and loyalty. Some suggestions and recommendation are given according to the results of the Analysis of the Empirical data.

ABSTRAK

Baru-baru ini Teknologi Maklumat telah membangun dengan pesat. Industri perbankan dipacu oleh permintaan disebabkan oleh pilihan yang berbeza sebagai contoh menyediakan perkhidmatan perbankan yang cekap kepada pelanggan. Internet perlu diambil kira sebagai satu isu penting bagi bank untuk menawarkan perkhidmatan kewangan. Dalam usaha untuk menjamin kadar yang pengekalan pelanggan yang tinggi dan mengurangkan kos untuk menarik pelanggan baru, membina kesetiaan dalam perbankan internet memainkan peranan yang penting. Semua bank cuba untuk mengekalkan pelanggan mereka dengan membuatkan mereka berpuas hati dengan perkhidmatan yang berbeza dan penyampaian kualiti perkhidmatan yang tinggi elektronik (e-SQ). Maka adalah amat penting dalam penentuan dimensi e-SQ untuk memenuhi keperluan pelanggan dalam persekitaran internet. Model ini dibangunkan dan diubahsuai untuk mengukur kualiti perkhidmatan dalam talian yang terdiri 7 dimensi dengan 30 item digunakan mengikut kajian literatur dan pendapat pakar. Item untuk mengukur kepuasan pelanggan telah diambil dari tahap keseluruhan kepuasan pengguna dan sepadan dengan ringkasan tindak balas berkesan atau pandangan pelanggan berhubung dengan pengalaman mereka dengan semua aspek mengenai perkhidmatan dalam talian. Lima perkara dalam Kelakuan Kesetiaan digunakan untuk mengukur pembinaan kesetiaan. Borang soal selidik telah diedarkan di kalangan pelanggan bank MEELAT. Akhir model (alat) untuk mengukur kualiti perkhidmatan perbankan dalam talian telah dibentuk yang merangkumi lima dimensi kualiti (kecekapan, prestasi perkhidmatan, perkhidmatan pelanggan, kenalan, estetik tapak) dengan jumlah sebanyak 19 item. Berdasarkan hasil analisis ia boleh membuat kesimpulan bahawa terdapat hubungan kasual di antara dimensi kualiti e-perkhidmatan, kepuasan pelanggan dan kesetiaan. Beberapa cadangan dan syor telah diberikan mengikut keputusan analisis data empirikal.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xii
	LIST OF FIGURES	xv
	LIST OF ABBEREVIATION	xvii
	LIST OF APPENDICES	xviii
1	INTRODUCTION	
1.1	Introduction	1
1.2	Background of The Study	2
1.3	Problem Statement	6
1.4	Research Questions	12
1.5	Objectives of The Study	13
1.6	Significance of The project	13
1.7	Scope of The Study	14
1.8	Limitation of Study	15
1.9	Proposal Plan	16

2 LITERATURE REVIEW

2.1	Introduction	17
2.2	E-Service Quality	17
2.2.1	Definition and Concepts	17
2.2.2	Importance of E-Service Quality	18
2.2.3	Theories Related to the e-Service Quality	19
2.2.3.1	Technology Acceptance Model	19
2.2.3.2	The GAP Model of e-SQ (Traditional SQ versus e-SQ From the Organization's perspective)	20
2.2.4	E-SQ Dimensions	25
2.2.5	Measurement of E-SQ	27
2.2.5.1	E-Service Quality Instruments	27
2.2.5.2	Logic behind Choosing SERVQUAL Instrument for This Study	30
2.3	Internet Banking	34
2.3.1	Internet Banking Definition	34
2.3.2	Review on previous studies regarding E-SQ dimensions in internet banking	35
2.3.3	Internet Banking in Iran	37
2.4	E-Customers Satisfaction Concepts and Its Importance	38
2.4.1	Customer Expectation	39
2.4.2	Customer Satisfaction Responses	41
2.4.2.1	Cognition in Satisfaction	41
2.4.2.2	Effect Response of Satisfaction	41
2.4.3	Measurement of Customer Satisfaction	41
2.4.3.1	Electronic American Customer Satisfaction Index	42
2.4.3.2	Expectation Disconfirmation Theory	43
2.5	E-Customers Loyalty Concept	44

2.5.1	Cognitive Loyalty	45
2.5.2	Affective Loyalty	46
2.5.3	Conative Loyalty	46
2.5.4	Action Loyalty	47
2.5.5	Measurement of Customer Loyalty	47
2.6	Framework	50
2.6.1	E-SQ and E-Customer Satisfaction	50
2.6.2	E-Customers Satisfaction and Loyalty	51
	Formation of E-SQ, E-Customer Satisfaction and	
2.6.3	Customer Loyalty and the Mediation Roll of	54
	Satisfaction in E-SQ and E-Loyalty Relation	

3 METHODOLOGY

3.1	Introduction	56
3.2	Research Design	56
3.3	Research Framework	57
3.3.1	Hypothesises	58
3.4	Sampling Frame	61
3.4.1	Target Population	61
3.4.2	Sampling Techniques	62
3.4.3	Sample Size	62
3.5	Type of Data	63
3.5.1	Primary Data	63
3.6	Research Instrument	64
3.7	Validity and Reliability of the Research	66
3.7.1	Factor Analysis	67
3.7.2	Reliability	67

3.8	Data Analysis	68
3.8.1	Descriptive Analysis	68
3.8.2	Pearson Correlation and Regression	69
3.8.3	Hierarchical Regression Mode	71
3.9	Summary of statistical analysis	73
4	DATA ANALYSIS	
4.1	Introduction	74
4.2	Response Background	75
4.3	Factor Analysis	76
4.4	Reliability Test	85
4.5	Multicollinearity Test	86
4.6	Hypothesis Testing	86
4.6.1	The effect of e-Service Quality Dimensions on Customer Satisfaction	86
4.6.2	The Effect of Satisfaction on e-Loyalty in Iranian Internet Banking	91
4.6.3	Mediating Effect of Online Satisfaction in the Relationship Between e-SQ and E-Loyalty	93
4.6.3.1	Path Analysis for Mediation	93
5	CONCLUSION AND RECOMMENDATION	
5.1	Introduction	108
5.2	Summary the Main Findings	108
5.2.1	Finding on the Dimensions of E-Service Quality of Iranian Internet Banking	109
5.2.2	Findings on the effect of Iranian Internet Banking e-SQ on e-Customer Satisfaction	113
5.2.3	Findings on the Effect of Iranian Internet Banking e-Customer Satisfaction on e-loyalty	114
5.2.4	Findings on the Mediating role of Customer Satisfaction on the Relationship between Iranian	114

	Internet Banking e-SQ and e-loyalty	
5.3	Implication of the Findings	115
5.4	Recommendations	118
5.4.1	Recommendation for Bank Managers Regarding to Findings of this Research	118
5.5	Research Limitation and Potentials for Future Works	121
5.6	Conclusion	123
	REFERENCES	124
	APPENDICES	140

LIST OF TABLES

TABLE NO.	TITLE	PAGE
2.1	Various dimensions and items in e-SQ instrument	31
2.2	Various online services provided by Iranian public banks	37
3.1	Likert Scale's Table for e-SQ, e-customer satisfaction and e-loyalty	66
3.2	Interpretation for Correlation Coefficient	70
3.3	Summary of Statistical Data Analysis	73
4.1	Frequency table of respondents' profile	75
4.2	KMO and Bartlett's Test	76
4.3	Total Variance Explained	78
4.4	Rotated Component Matrix	79
4.5	KMO and Bartlett's Test	80
4.6	Total Variance Explained	81
4.7	Second Analysis of Rotated Component Matrix	82
4.8	Original Proposed Electronic Service Quality Items and Dimensions Compared with New Electronic Service Quality Items and Dimensions; Extracted from Factor Analysis.	83
4.9	Cronbach's Alpha Values of the Constructs	85
4.10	Correlation between dimensions of e-SQ and e-satisfaction	87
4.11	The effect of e-SQ dimensions on online satisfaction	88
4.12	Influence of e-SQ dimensions on e-satisfaction	90

4.13	Correlation between Online Satisfaction and e-Loyalty	91
4.14	The Effect of e-Customer Satisfaction and e-Loyalty (Model summary)	92
4.15	Influence of online satisfaction on e-loyalty	92
4.16	Relationship between efficiency and loyalty	94
4.17	Relationship between Service performance and loyalty	95
4.18	Relationship between customer service and loyalty	95
4.19	Relationship between Contact and loyalty	96
4.20	Relationship between Site Aesthetic and loyalty	96
4.21	Relationship between efficiency and online satisfaction	97
4.22	Relationship between Service performance and online satisfaction	97
4.23	Relationship between customer service and online satisfaction	97
4.24	Relationship between contact and online satisfaction	98
4.25	Relationship between Site Aesthetic and online satisfaction	98
4.26	Relationship between satisfaction and loyalty	99
4.27	Relationship between efficiency, satisfaction, and loyalty (model summary)	99
4.28	Results of Hierarchical Multiple Regression Analysis for the Mediating Effect of satisfaction in the relationship between efficiency and loyalty	100
4.29	Relationship between Service performance, satisfaction, and loyalty (model summary)	101
4.30	Results of Hierarchical Multiple Regression Analysis for the Mediating Effect of satisfaction in the relationship between Service performance and loyalty	101
4.31	Relationship between customer service, satisfaction, and loyalty (model summary)	102

	Results of Hierarchical Multiple Regression Analysis	
4.32	for the Mediating Effect of satisfaction in the relationship between customer service and loyalty	103
4.33	Relationship between contact, satisfaction, and loyalty (model summary)	104
	Results of Hierarchical Multiple Regression Analysis	
4.34	for the Mediating Effect of satisfaction in the relationship between contact and loyalty	104
4.35	Relationship between website aesthetics, satisfaction, and loyalty (model summary)	105
	Results of Hierarchical Multiple Regression Analysis	
4.36	for the Mediating Effect of satisfaction in the relationship between site aesthetic and loyalty	105
4.37	Summary of testing mediator hypothesis	106
5.1	New Internet Banking Items and Dimensions Extracted from Factor Analysis	111
	Summary of Previous Research on Internet Banking e-	
5.2	SQ in Selected Countries and in Iran Based on this Research	112

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
2.1	Technology acceptance model	20
2.2	Gap Model	22
2.3	Conceptual model for understanding and improving e-SQ	23
2.4	Electronic American customer satisfaction index	42
2.5	Expectation disconfirmation model	43
2.6	Conceptualization on loyalty dimensionality	49
2.7	Modified frameworks clarifying the relationship between e-service quality, e-customer satisfaction and e-loyalty	55
3.1	Proposed framework	61
3.2	Hierarchical regression model	75
4.1	Modified research model	84
4.2	The effect of e-service quality dimensions on satisfaction	90
4.3	Four Steps To Analysis the Mediation Variable	94
4.4	The relationship between e-service quality, online satisfaction, and loyalty	107
4.1	Modified research model	84
4.1	Modified research model	84

4.1	Modified research model	84
4.1	Modified research model	84

LIST OF ABBREVIATION

TABLE NO.	TITLE
EACSI	Electronic American Customer Satisfaction Index
E-Service	Electronic Service
E-SQ	Electronic Service Quality
SQ	Service Quality
TAM	Technology Acceptance Model
TPB	Technology Planned Behavior
TRI	Technology Readiness Index

LIST OF APPENDCES

APPENDIX NO.	TITLE	PAGE
A	Questionnaire	140
B	Multicollinearity Test Result	144

CHAPTER 1

INTRODUCTION

1.1 Introduction

Internet banking is one of the increasingly important businesses in electronic business worldwide. Building loyalty in internet banking is significant for banks to guarantee high rate of customer retention and reduced cost for recruiting new customers which leads to long-term profitability. From the banks perspective, to retain their customers, they should try to make customers satisfied with their services and offerings, and this can be achieved through delivering high quality of electronic service (e-SQ). Most studies in e-SQ researches indicated that e-SQ and e-satisfaction have strong correlation and e-SQ is significantly and positively affected e-satisfaction (Zeithaml, 2002). Subsequently, high e-SQ, with high e-satisfaction will contribute to the customer retention and e-loyalty (Parasuraman et al., 2005). This fact makes it important for the banks to have a clear view on the impacts of their internet banking e-SQ and e-satisfaction on e-loyalty to stay in competitive in the market.

This chapter describes the context of the research. It begins with a background of the study and followed by problem statement, purpose of the study, research objectives, and significance of study, scope of study and finally the limitation of study.

1.2 Background of the Study

In recent years, technological advancements in the banking industry continue to revamp the way financial services are delivered (Claessens et al., 2002). For example, the Intranet become the channel in which banks could offer their financial services to their customers (Sadiq Sohail & Shanmugham, 2003). In recent years, internet banking has experienced exceptional explosive growth that has dramatically transformed traditional practices in banking (Gonzalez et al., 2008). In the world of banking, the development of information technology has had an enormous effect in the formation of more flexible payment methods and more efficient banking services. The Internet provides an efficient delivery channel through which customer banking requirement can be delivered more conveniently and economically (Gkoutzinis, 2006). This has motivated many banks in the world to invest in their Internet banking infrastructure. Such shift implies that understanding how customers perceive and evaluate e-service quality is of importance for banks that offer internet banking.

With nationwide growth in Internet connectivity, in the early 90s, the Iranian banks upgraded their automation standards. Gradually, the foundation for online data transmission is formed. In the late 90s, a few of Iranian banks began to implement internet based services ("Economic Focus," 2007). Nowadays; technology runs through every part of the banking business in Iran. Over the last 20 years, more of daily life activities are moved online in Iran. For this, internet banking services have become increasingly important. At the same time, more enterprises are trying to attract and win customers in the highly competitive electronic market by providing electronic service (Mirza et al., 2009). Therefore the topic of e-service become very important for enterprises that offer internet based services.

E-service is able to determine the success or failure of electronic commerce (e-commerce) applications, other than the fact that it provides customers with a convenient service booking channel that supplies and transfers interactive transaction information (Santos, 2003; Z. Yang & Fang, 2004). Internet banking is one of the

most common types of e-service where financial transactions can be done through the Internet at any time and place (Sathye, 1999).

Delivering quality service is considered as one of the factors that determine the success of a business in today's competitive environment. The first formal definition of electronic service quality (e-SQ) is provided by Zeithaml *et al* (2002), which define e-SQ as 'the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery of product and services. For better understanding of e-SQ the author brings some differences between E-SQ and traditional service quality (SQ) in the sense that in traditional SQ, efficiency refers only to employers efficient activities, but in e-SQ, it refers to website efficiency. Furthermore, e-SQ involves some new dimensions related to website-specific attributes (e.g., website appearance, functionality, ease of navigation, and security) that are uncommon in traditional SQ. (Parasuraman & Zinkhan, 2002; Zeithaml., et al., 2002) revealed that e-SQ schemes usually include regular (core) and recovery dimensions. The core dimension is consisted of key drivers like efficiency, fulfilment, reliability, and privacy; these key drivers are based on a company's website performance. On the other hand, key drivers of the recovery dimension are like responsiveness, real-time access to help (contact), and compensation; these are related to the company's personal services. In traditional SQ, such classification does not exist, and its key drivers are mainly efficiency, fulfilment, tangibility, empathy, and reliability only (Parasuraman et al., 1994).

Besides service quality, customer satisfaction is also a critical issue in the success of any business system; traditional or modern (C. F. Ho & Wu, 1999). Consumer satisfaction is a subject of much attention in the marketing literature because of its potential influence on consumer behavioural intention and customer retention (Cronin et al., 2000). Customer satisfaction is defined as 'the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations'. Traditionally, the level of customer satisfaction is determined by the quality of service, the price level, and the purchasing process. But in the e-commerce, Technology, shopping, and products are the main constructors

that are usually related to customer e-satisfaction, and e-satisfaction is evaluated through various attributes (Schaupp & Bélanger, 2005).

Most marketing literature suggests that service quality is strongly related to online customer satisfaction (Carr, 2007; Devaraj et al., 2002). The relationship between expectation, perceived service quality, and customer satisfaction has been investigated in a number of researches (Zeithaml, 1988). They found that a very strong relationship exists between SQ and customer satisfaction (Parasuraman et al., 2004). Increase in a bank's SQ can satisfy and nurture the customer's loyalty towards the bank, and this is an important way to retain valued customers (Nadiri et al., 2009). Simply to say, a less than expected SQ will cause the customers to be unhappy (Jain & Gupta, 2004).

Internet is ideal for carrying out banking activities because it helps to save cost and offers higher speed in information transmission. These two main advantages are logical enough to encourage banks to shift as many of their services online as they can. However, the question now lies in how customer loyalty can be fostered and strengthened when there is a lack of human touch.

The modelling of loyalty is not a new topic in the academic world (Jacoby & Kyner, 1973). In an e-commerce context, building e-loyalty is a difficult challenge if an online firm wishes to differentiate itself from its competitors. E-loyalty brings high rate of customer retention and reduced cost for recruiting, and getting new customers means long-term profitability to the online retailer (Reichheld & Schefter, 2000).

Most of the early studies define loyalty as repetitive purchasing of a service or product (Homburg & Giering, 2001). Such definition has been heavily criticized as it cannot differentiate between true and spurious loyalty: "The key point is that, this spurious loyalty does not mean any attachment to brand attributes, and buyers can be immediately captured by another brand when better deals are being offered

(Day, 1969). Therefore, repetitive purchasing behaviour does not mean loyalty, and a combination of attitudinal and behavioural attributes is recommended (Grisaffe, 2001) for the evaluation of customer loyalty. Satisfaction is positively related to loyalty (Stewart, 1999) even in the online environment. Moreover, (Shankar et al., 2003) indicated that the effect of satisfaction on loyalty is stronger online than offline. Recent conceptualizations of satisfaction suggest that overall satisfaction is largely an affective evaluation of (Fornell & Wernerfelt, 1987; R.L. Oliver, 1993; Westbrook & Oliver, 1991) and this view prove that cumulative (overall satisfaction) encompass with behavioural intention form the altitudinal loyalty which in term leads to actual behaviour and eventually the loyalty phases will be completed.

E-commerce success models like that of DeLone and McLean (DeLone & McLean, 1992, 2004) developed causal relations between antecedents (indirect measures) of overall user/customer satisfaction (e.g., system quality and information quality, service quality), overall user/customer satisfaction, and consequents of overall user/customer satisfaction (customer loyalty). There are an increasing number of firms using the Internet to manage their businesses and many have succeeded. Other than system quality and information quality, service quality is also an important factor and antecedent in measuring e-commerce success and customer satisfaction respectively in online shopping environment (Pitt et al., 1995; Rodgers et al., 2005). Therefore having more emphasis on this circle can be served as a sense of success in highly competitive word of e-commerce activities.

Internet banking is one of the most common type of e-services which is defined as using the Internet to conduct banking activity like: transferring funds, paying bills, viewing account balances, paying mortgages, and etc. (Gkoutzinis, 2006). Internet banking deliver services which are available only online such as electronic commerce, real-time brokerage, financial information menus, e-mail alerts, and tax payment. Online banking is a service that benefits both banker and customer. The convenience of being able to access accounts at any time as well as the ability to perform transactions without visiting a local branch continue to draw many people to be involved (Koskosas, 2011). Online banking is advantageous to

the bank because the Internet banking can increase customer satisfaction since customers can now access their accounts at any place and time convenient to them, thus fostering a closer relationship with the bank (Mattila et al., 2002). As for the customers, comparison between different service offerings is much easier online and switching costs are lower (Santos, 2003). Therefore, to retain its customers, the banker need to continuously satisfy its customers with more and better services finally achieve long relationship with its customers which is define in having loyal customer, but delivering high quality electronic services requires understanding of the Internet service quality dimensions so that a competitive advantage is gained.

1.3 Problem Statement

For banks, e-commerce has dramatically change the way relationships with customers are built and maintained. Many studies have measured the service quality of real banks; however, there are very few studies that have developed measures for assessing virtual banks (Jun & Cai, 2001). The attribute for defining a high quality service delivery has to make a clear differentiation between traditional and internet-based service, but measuring the quality of online service is a challenging one (Y. Li et al., 2002). As the use of Internet banking steadily increases over the years (Fredriksson, 2003), it is crucial to deepen our knowledge on high-quality service delivery over the Internet so that banks can remain competitive. Service quality is a key determinant to distinguish a service from another to gain advantages, and not to forget, comparison costs over the Internet are relatively low (C. Grönroos, 2007; Santos, 2003). All in all, service quality is a crucial issue in Internet banking because it will determine whether the customer will stay loyal with the bank or not (Reibstein, 2002).

Banking is traditionally a service that needs human touch, but the lacking of it in online channels makes it even more important to grab every opportunity to foster close and friendly relationship with the customers (Broderick & Vachirapornpuk, 2002).

(Parasuraman, et al., 2004) and (Asubonteng et al., 1996) defined service quality as the difference between customers' expectations for service performance prior to the service encounter and their perceptions of the service received. All of us have different expectations for a quality service, but there are some common requirements and expectations among internet users which banks should depict them and offer to meet users' expectations.

According to (Jun & Cai, 2001), most Internet banking services are still lagging behind their customers' quality expectations. In order to enhance customer loyalty, portals are required to put a strong emphasis on their customers' quality demands since these demands are steadily increasing over time due to growing competition in the Internet banking industry (Jun & Cai, 2001)

A company's electronic service quality as perceived by its customers can be measured in several ways. The best-known methods are: WebQual, developed by (Loiacono et al., 2002); e-SERVQUAL, developed by (Zeithaml, et al., 2002); and e-TailQ, developed by (Wolfenbarger & Gilly, 2003). These methods share common core service quality dimensions, such as efficiency, fulfilment, system availability, privacy, responsiveness, compensation, reliability, assurance empathy, tangible, efficiency, trust, security, and contact.

The usage of e-SQ instruments such as E-SERVQUAL can determine essential dimensions that require the researchers' attention to review their content and construct validities in different contexts to suit the climate and type of services being provided by a certain country. Previous researches' findings on these dimensions demonstrated the need to re-examine the suitability of using the identified dimensions in different countries. For examples, web-site setting, access, web site interface, trust, attention, and credibility were dimensions of e-SQ in UK (Jayawardhena, 2004), but in Hong Kong, other dimensions such as credibility, efficiency, problem handling, and security are more profound (N. Y. M. Siu & J. C. W. Mou, 2005). Credibility, efficiency, fulfilment, security, site aesthetics, system availability are important in Sweden (Kenova & Jonasson, 2006), while in Taiwan,

efficiency, fulfilment, system availability, privacy, contact, compensation, site aesthetics, and customization are more popular (Wu et al., 2008). Efficiency, contact, and customization are evaluated in USA (Joseph et al., 1999), and reliable services, fulfilment, security/trust, site aesthetics, responsiveness/contact, and ease of use are some common dimensions in Iran (Zavareh et al., 2012). Lastly, in Indonesia, the popular dimensions include assurance-fulfilment, efficiency-system availability, privacy, contact-responsiveness, and website aesthetics and guide (Mohd Shoki Md Ariff, 2011).

However, given that the theories of e-SQ are based on consumer perceptions, do these perceptions translate well to other countries like Iran? furthermore that the proposed e-SQ dimensions in Iranian Internet banking as put forth by Zavareh (Zavareh, et al., 2012) which consider generally applicable for Iranian internet banking needs further validation. It is preferable that these dimensions are investigated further and from this point of view, looking at the problem of how to measure the quality of Internet banking services and customers' perception of their quality seems appropriate to be conducted in Iran. This raises first question of current study:

Research Question 1: What are the dimensions of e-service quality for internet banking in Iran?

The concept of "Customer or User Satisfaction" as a key business performance indicator has been used extensively since the early 1980s (Bailey & Pearson, 1983; Ives et al., 1983). An understanding of customer satisfaction must be a basic parameter used to evaluate the performance of products and services (Y. Yoon & Uysal, 2005). Consumer satisfaction has been the subject of much attention in the literature because of its potential influence on consumer behavioural intention and customer retention (Cronin, et al., 2000). Specially in e-commerce, satisfaction

is considered as an important construct because it affects participants' motivation to stay with the channel (Devaraj, et al., 2002).

The formation of the relationship between e-service quality and customer satisfaction is indicated in the electronic American Customers Satisfaction Index (EACSI). This is an index which supports that the relationship between e-SQ and satisfaction is a national indicator of customer evaluations for quality of good and service available. Previous studies consider overall satisfaction to be primarily a function of perceived service quality. (Cronin, et al., 2000; Parasuraman et al., 1988) Overall satisfaction reflects customer's cumulative impression of a firm's service performance (Devaraj, et al., 2002) and that, in turn, may serve as a better predictor of customer loyalty (Yang & Peterson, 2004).

The extant literature suggests that service quality is strongly related to online satisfaction (Devaraj, et al., 2002). Most studies in e-SQ researches indicated that e-SQ and e-satisfaction have strong correlation and e-SQ is significantly and positively affected e-satisfaction (Fassnacht & Köse, 2007).

Argument that supports SQ as an antecedent of satisfaction states that customers do not necessarily purchase the highest quality service, but may also consider convenience, price, and availability (Kassim & Ismail, 2009). It is important to know which dimensions have higher degree of influence on customer satisfaction that banks can concentrate to keep their customer satisfied.

RQ2: Is there a positive significant effect of e- SQ on customer e-satisfaction in Iranian internet banking system?

Loyal customers may worth up to ten times than average customer and benefit the sellers from many perspectives. Thus, customer loyalty is a critical

indicator to measure the success of marketing strategies (R. E. Anderson & Srinivasan, 2003; Y. Yoon & Uysal, 2005). Many companies try to maintain a good relationship with their loyal customers because the best designed e-business model can also be ruined without customer loyalty. As a barometer of customer's behavioural intentions and loyalty, customer satisfaction cannot be neglected (R. E. Anderson & Srinivasan, 2003; H. E. Yang & Yeh, 2006).

Theory of profit chain indicates that customer satisfaction is related to customer loyalty, which in turn is related to profitability (Heskett et al., 2008). Another theory, which is the expectation-confirmation paradigm, hypothesizes that a consumer's level of satisfaction with a product/service determines re-purchase intention and loyalty. The study of customer repurchase behaviour continues to catch the attention of researchers since a large portion of consumer purchases are second time purchases rather than initial acceptances (R.L. Oliver, 1993).

Satisfied customers are more likely to possess a stronger repurchase intention and to recommend the product/service to the people around them (E. W. Anderson et al., 1994; Reichheld & Teal, 2001; Skogland & Sigauw, 2004; Taylor & Baker, 1994). In this study, customer loyalty was attitudinally measured by customers' behavioural intention to continuously or increasingly conduct business with their present company, and their inclination to recommend the company to other people. This measure has proven to be useful in previous research (Zeithaml. et al., 1996). Satisfied customers tend to easily favour over a certain service than those who are not satisfied (Bolton & Lemon, 1999; Ram & Jung, 1991). In addition, they are more likely to possess a stronger repurchase intention and to recommend the product/service to their acquaintances (Zeithaml., et al., 1996) Customers' overall satisfaction is an indication of how well customers like their experience at the site, and it is probably the best indication of their willingness to return to the site again. This simply means that, if a customer is not happy, he or she will be most unlikely to do future purchases and being loyal.

As mentioned earlier, comparison between different service offerings is much easier and switching costs are lower on the Internet (Santos, 2003). To retain its customer, it is essential for banks gain a better understanding of the relationship between satisfaction and loyalty in the online environment to critically allocate their online marketing efforts between satisfaction initiatives and loyalty programs. If, for example, the firm finds that loyalty is associated with increased satisfaction, it can directly focus on enhancing their services offering to make their customer satisfied and to build long term relationship with them, but this relationship needs to be verified through the third research question:

RQ3: Is there a positive significant effect of customers' e-satisfaction on their e-loyalty in Iranian internet banking?

In current marketing study, the measures of perceived quality, satisfaction, and loyalty on behalf of customers have been utilize to evaluate firm's productivity and its marketing performance, (Cortinas et al., 2004). Although Satisfaction is a medium between quality level perceptions and emergence of behavioural intentions (Cronin Jr & Taylor, 1992; Gotlieb et al., 1994). The notion of "mediating" a relationship clearly suggests that there is a third variable (Baron & Kenny, 1986), such as satisfaction. In fact, numerous studies have established relationships between service quality and loyalty, hypothesising an indirect effect (Ostrowski et al., 1993; Patterson et al., 1997; Pritchard & Howard, 1997) mediated by satisfaction. (Rust & Zahorik, 1993) and (Storbacka et al., 1994) studied the impact of SQ on satisfaction, and satisfaction on customer loyalty. They found SQ to be positively correlated with satisfaction and leads to increased purchase (loyalty). (Ismail et al., 2006) concluded that as service improve, the probability of customer satisfaction increases and consequently, customer's loyalty will increase as well (Arasli et al., 2005).

Nevertheless, an important question remains will satisfaction antecedents leaves equal effect on behavioural consequences the way overall satisfaction does? This is an important question that will have tremendous effect on both businesses and the academic world, as suggested by (Bloemer et al., 1999). In this study, e-service quality is considered as an antecedent of satisfaction. If the answer is yes, the focus of a company may solely be on improving customers' overall satisfaction. If not, firms may devote their limited and costly resources to those factors leading to more desirable outcomes. For instance, in advancing market share, the managers can focus more on increasing the repurchase intention of customers and improving word-of-mouth communications as a marketing measure. In short, this study shall identify the pattern of relationships among overall satisfaction, its antecedents, and its consequences.

RQ4: Does Customer e- satisfaction mediate the e-SQ-e-Loyalty relationship in internet banking?

1.4 Research Questions

1. What are dimensions of e-service quality for internet banking in Iran?
2. Is there significant positive relationship between e- SQ and customer e-satisfaction in Iranian internet banking?
3. Is there significant positive relationship between customers' e-Satisfaction and their e-loyalty in Iranian internet banking?
4. Does Customer e- satisfaction mediate the e-SQ-e-Loyalty relationship in internet banking?

1.5 Objectives of the Study

The main research objectives of this research are:

1. To determine dimensions of e-SQ in internet banking.
2. To examine the relationship between e-SQ and customer e-satisfaction in Internet Banking.
3. To examine the relationship between customers' e-satisfaction and their e-loyalty in internet banking.
4. To examine the mediating effect of e-satisfaction on the relationship between e-service quality and e-loyalty in internet banking.

1.6 Significance of The Study

The result of the study would give the deeper vision of causal relations between antecedents (indirect measures) of overall user/customer satisfaction (service quality) with overall user/customer satisfaction, and consequents of overall user/customer satisfaction (customer loyalty) in e-commerce specifically in internet banking. For this firstly, the study would determine the main dimensions that constitute Iranian Internet banking e-SQ, and whether or not these dimensions are identical with what have been identified in published reports in other countries.

Secondly, by investigating of relationship between e-service quality dimensions and e-customer satisfaction it would be clear that which dimension have more impact on satisfaction of internet banking users as a result the banking mangers could allocate their resource properly.

Finally investigating the relationship between e-customer satisfaction and e-loyalty also its mediating role on e-service quality and e-loyalty relationship so that the focus of a company which provide e-services should be solely on improving customer overall satisfaction.

The significant of this study is that there is no comprehensive work on this area in the case study of this research which is Kerman one of the provinces of Iran.

This study attempts to achieve the following assumptions:

1. It is anticipated to find out To the main e-SQ dimensions in internet banking
2. It is expected to identify the relationship between e-SQ e-customer satisfaction and e-loyalty and going further to investigate the mediating role of satisfaction in this assumed relationship.

1.7 Scope of The Study

The formation of E-SQ, e-customer satisfaction and e-loyalty in Internet banking

This study focused on customers' perception of e-service quality and its relationship with online customer satisfaction and e-loyalty in internet banking.

○ Dimensions of e-SQ

This study choose e-servqual theory and its dimension for assessing internet banking e-SQ according to this theory there are four core e-SQ dimensions that are: efficiency, fulfilment, system availability and privacy as well as recovery dimensions which are: contact, responsiveness, compensation (Zeithaml et al., 2000; Zeithaml.,

et al., 2002). Furthermore in this study author add one more dimensions as review in previous studies in the area of internet banking which is **site aesthetic**.

○ **Location**

This study focuses on MELLAT bank (the public bank in Iran) customers. Reason behind choosing the public bank is ease of access to their customers as the private banks are still not widely popular among people in Iran also in this research the author is looking for relationship between variables for this reason it is more appropriate to choose the location in which have the most number of active users who interact with bank e-service quality attributes a lot and also According to the first International Festival of Iranian Banks (IFIB) 2010, MELLAT bank achieved highest rank in the area of internet banking services among other banks in Iran <http://www.ibfi.ir/>.

○ **Respondent**

The participation involved in this study is the current users of Internet banking in this public bank because the study confined to analysis of Internet banking e-SQ from the customer perspective.

1.8 Limitation of Study

There are some limitations of this study which should be addressed in the future. In this study measuring e-service quality relied only on perception component, for this there is a supposition that the customers have informed idea about what their expectations are, and what their perceptions are about their service experiences. Also there are other important antecedents of online satisfaction, such as information quality and system quality, in addition to service quality, being considered in an online satisfaction and loyalty model (Rodgers, et al., 2005), not included in the study. This study is limited to the public Iranian Internet bank users

the results of this study could not be generalized to other groups or to users at any other time than the year of the study. Furthermore this study is limited to gathering empirical data over a questionnaire from a sample of the population in Kerman (a city in Iran), who are using Internet banking services.

1.9 Proposal Plan

This thesis is devised into five chapters. Chapter one presents an introduction and the background of the study. Besides that it searches into the problem statement, research questions and the scope of the study. Chapter two concentrates on reviewing previous literatures related to the context of the study, related theories, models and presenting a modified framework. Chapter three identifies the methodology, the sampling and the instruments that were used to conduct the research. Chapter four the analysis and five recommendation and implication of findings.

REFERENCES

- Al-Hawari, M., & Ward, T. (2006). The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. *Marketing Intelligence & Planning*, 24(2), 127-147.
- Ali Sanayei, A. S., Mohammad Ali Nasirzadeh. (2011). E-service quality, e-satisfaction and e-loyalty from the view of Iranian users. *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS*, 03(No.06).
- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: findings from Sweden. *the Journal of Marketing*, 53-66.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123-138.
- Arasli, H., Katircioglu, S. T., & Mehtap-Smadi, S. (2005). A comparison of service quality in the banking industry: Some evidence from Turkish-and Greek-speaking areas in Cyprus. *international journal of bank marketing*, 23(7), 508-526.
- Ariff, M. S. M., Yun, L. O., Zakuan, N., & Jusoh, A. (2012). Examining Dimensions of Electronic Service Quality for Internet Banking Services. *Procedia-Social and Behavioral Sciences*, 65, 854-859.
- Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL revisited: a critical review of service quality. *Journal of Services Marketing*, 10(6), 62-81.
- Back, K. J. (2001). *The effects of image congruence on customer satisfaction and brand loyalty in the lodging industry*. The Pennsylvania State University.
- Back, K. J., & Parks, S. C. (2003). A brand loyalty model involving cognitive, affective, and conative brand loyalty and customer satisfaction. *Journal of Hospitality & Tourism Research*, 27(4), 419-435.

- Bahia, K., & Nantel, J. (2000). A reliable and valid measurement scale for the perceived service quality of banks. *international journal of bank marketing*, 18(2), 84-91.
- Bailey, J. E., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management science*, 29(5), 530-545.
- Barnes, S. J., & Vidgen, R. T. (2002). An integrative approach to the assessment of e-commerce quality. *Journal of Electronic Commerce Research*, 3(3), 114-127.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bauer, H. H., Hammerschmidt, M., & Falk, T. (2005). Measuring the quality of e-banking portals. *international journal of bank marketing*, 23(2), 153-175.
- Bearden, W. O., & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of marketing research*, 21-28.
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS quarterly*, 25(3), 351-370.
- Bitner, M. J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *the Journal of Marketing*, 69-82.
- Bloemer, J., De Ruyter, K., & Wetzels, M. (1999). Linking perceived service quality and service loyalty: a multi-dimensional perspective. *European Journal of marketing*, 33(11/12), 1082-1106.
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of marketing research*, 171-186.
- Brady, M. K., & Robertson, C. J. (2001). Searching for a consensus on the antecedent role of service quality and satisfaction: an exploratory cross-national study. *Journal of Business Research*, 51(1), 53-60.
- Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of personality and social psychology*, 47(6), 1191.
- Broderick, A. J., & Vachirapornpuk, S. (2002). Service quality in internet banking: the importance of customer role. *Marketing Intelligence & Planning*, 20(6), 327-335.

- Calisir, F., & Gumussoy, C. A. (2008). Internet banking versus other banking channels: Young consumers' view. *International Journal of Information Management*, 28(3), 215-221.
- Carr, C. L. (2007). A Psychometric Evaluation of the Expectations, Perceptions, and Difference-Scores Generated by the IS-Adapted SERVQUAL Instrument. *Decision Sciences*, 33(2), 281-296.
- 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.
- Centeno, C. (2003). *Adoption of internet services in the enlarged European union: lessons from the internet banking case*: European Commission, Joint Research Centre.
- Chan, S., & Lu, M. (2004). Understanding internet banking adoption and use behavior: A Hong Kong perspective. *Journal of Global Information Management (JGIM)*, 12(3), 21-43.
- Chang, H. H., & Chen, S. W. (2009). Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information & management*, 46(7), 411-417.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *the Journal of Marketing*, 81-93.
- Chou, W., & You, X. (2005). The study about Internet banking service quality, relation quality, and customer loyalty. *Journal of Business Administration*, 65, 31-60.
- Claessens, S., Glaessner, T., & Klingebiel, D. (2002). Electronic finance: reshaping the financial landscape around the world. *Journal of Financial Services Research*, 22(1), 29-61.
- Cortinas, M., Elorz, M., & Villanueva, M. L. (2004). Retail store loyalty management via an analysis of heterogeneity of the service elements. *The International Review of Retail, Distribution and Consumer Research*, 14(4), 407-437.
- Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage Publications, Incorporated.

- Cristobal, E., Flavián, C., & Guinalú, M. (2007). Perceived e-service quality (PeSQ): measurement validation and effects on consumer satisfaction and web site loyalty. *Managing service quality*, 17(3), 317-340.
- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *the Journal of Marketing*, 55-68.
- Cyr, D., Hassanein, K., Head, M., & Ivanov, A. (2007). The role of social presence in establishing loyalty in e-Service environments. *Interacting with Computers*, 19(1), 43-56.
- Dabholkar, P. A., Shepherd, C. D., & Thorpe, D. I. (2000). A comprehensive framework for service quality: an investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-173.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management science*, 35(8), 982-1003.
- Day, G. S. (1969). A two dimensional concept of brand loyalty *Journal of Advertising Research*, 9, 29-35.
- DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95.
- Delone, W. H., & Mclean, E. R. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, 9(1), 31-47.
- Denzin, N. K. (2009). *The research act: A theoretical introduction to sociological methods*: Aldine De Gruyter.
- Devaraj, S., Fan, M., & Kohli, R. (2002). Antecedents of B2C channel satisfaction and preference: validating e-commerce metrics. *Information Systems Research*, 13(3), 316-333.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, 22(2), 99-113.

- Economic Focus. (2007). *Iran Daily Newspaper*. Retrieved from <http://iran-daily.com/1385/2770/html/focus.html>
- Fassnacht, M., & Köse, I. (2007). Consequences of Web-based service quality: Uncovering a multi-faceted chain of effects. *Journal of interactive marketing*, 21(3), 35-54.
- Floh, A., & Treiblmaier, H. (2006). What keeps the e-banking customer loyal? A multigroup analysis of the moderating role of consumer characteristics on e-loyalty in the financial service industry. *Journal of Electronic Commerce Research*, 7(2), 97-110.
- Foley, J. R., & Clifton, R. A. (1990). Locus of Control, organizational climate, and participation in staff development: A study of college instructors. *Canadian Journal of Higher Education*, 20(2), 45-59.
- Fornell, C., & Wernerfelt, B. (1987). Defensive marketing strategy by customer complaint management: a theoretical analysis. *Journal of marketing research*, 337-346.
- Fredriksson, O. (2003). *Internet-Based Self-Services: Relational Aspects of E-Banking—a Private Client Survey Analysis*: IMIT Working Paper Series 2003: 136, Institute for management of innovation technology, Information Systems Department, Karlstad University, Karlstad, Sweden.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *the Journal of Marketing*, 1-19.
- Gelade, G. A., & Young, S. (2005). Test of a service profit chain model in the retail banking sector. *Journal of Occupational and Organizational Psychology*, 78(1), 1-22.
- GHANE, S., Fathian, M., Gholamian, M., ZBAKH, M., EL KETTANI, M. D., JAMBARI, H., et al. (2011). FULL RELATIONSHIP AMONG E-SATISFACTION, E-TRUST, E-SERVICE QUALITY, AND E-LOYALTY: THE CASE OF IRAN E-BANKING. *Journal of Theoretical and Applied Information Technology (JATIT)*, 33(1).
- Gitman, L. J., & McDaniel, C. D. (2005). *The future of business : the essentials*. Mason, Ohio; London: South-Western ; Thomson Learning [distributor].
- Gkoutzinis, A. A. (2006). *Internet banking and the law in Europe: regulation, financial integration and electronic commerce*: Cambridge University Press.

- Gonzalez, M. E., Mueller, R. D., & Mack, R. W. (2008). An alternative approach in service quality: an e-banking case study.
- Gotlieb, J. B., Grewal, D., & Brown, S. W. (1994). Consumer satisfaction and perceived quality: complementary or divergent constructs? *Journal of Applied Psychology*, 79(6), 875.
- Grisaffe, D. (2001). Loyalty-attitude, behavior, and good science: A third take on the Neal-Brandt debate. *JOURNAL OF CONSUMER SATISFACTION DISSATISFACTION AND COMPLAINING BEHAVIOR*, 14, 55-59.
- Grönroos, C. (1998). Marketing services: the case of a missing product. *Journal of business & industrial marketing*, 13(4/5), 322-338.
- Grönroos, C. (2004). The relationship marketing process: communication, interaction, dialogue, value. *Journal of business & industrial marketing*, 19(2), 99-113.
- Grönroos, C. (2007). *Service management and marketing: customer management in service competition*: John Wiley & Sons.
- Hair, J. F. (1998). *Multivariate data analysis*. Upper Saddle River, N.J.: Prentice Hall.
- Hair, J. F. (2003). *Essentials of business research methods*. Hoboken, NJ: Wiley.
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management*, 7(4), 27-42.
- Harris, L. C., & Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing*, 80(2), 139-158.
- Heinze, N., & Hu, Q. (2006). The evolution of corporate web presence: a longitudinal study of large American companies. *International Journal of Information Management*, 26(4), 313-325.
- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (2008). Putting the service-profit chain to work. *Harvard business review*.
- Ho, C.-T. B., & Lin, W.-C. (2010). Measuring the service quality of internet banking: scale development and validation. *European Business Review*, 22(1), 5-24.
- Ho, C. F., & Wu, W. H. (1999). *Antecedents of customer satisfaction on the Internet: An empirical study of online shopping*. Paper presented at the

PROCEEDINGS OF THE HAWAII INTERNATIONAL CONFERENCE
ON SYSTEM SCIENCES.

- Hoffman, D. L., Novak, T. P., & Peralta, M. A. (1999). Information privacy in the marketplace: Implications for the commercial uses of anonymity on the Web. *The Information Society*, 15(2), 129-139.
- Homburg, C., & Giering, A. (2001). Personal characteristics as moderators of the relationship between customer satisfaction and loyalty—an empirical analysis. *Psychology and Marketing*, 18(1), 43-66.
- Ismail, I., Haron, H., Ibrahim, D. N., & Isa, S. M. (2006). Service quality, client satisfaction and loyalty towards audit firms: Perceptions of Malaysian public listed companies. *Managerial Auditing Journal*, 21(7), 738-756.
- Ives, B., Olson, M. H., & Baroudi, J. J. (1983). The measurement of user information satisfaction. *Communications of the ACM*, 26(10), 785-793.
- Jacoby, J., & Kyner, D. B. (1973). Brand loyalty vs. repeat purchasing behavior. *Journal of marketing research*, 1-9.
- Jain, S. K., & Gupta, G. (2004). Measuring service quality: SERVQUAL vs. SERVPERF scales. *Vikalpa*, 29(2), 25-37.
- Jayawardhena, C. (2004). Measurement of service quality in internet banking: the development of an instrument. *Journal of Marketing Management*, 20(1-2), 185-207.
- Jeong, M., Oh, H., & Gregoire, M. (2003). Conceptualizing web site quality and its consequences in the lodging industry. *International Journal of Hospitality Management*, 22(2), 161-175.
- Jones, T., & Taylor, S. F. (2007). The conceptual domain of service loyalty: how many dimensions? *Journal of Services Marketing*, 21(1), 36-51.
- Joseph, M., McClure, C., & Joseph, B. (1999). Service quality in the banking sector: the impact of technology on service delivery. *international journal of bank marketing*, 17(4), 182-193.
- Jun, M., & Cai, S. (2001). The key determinants of internet banking service quality: a content analysis. *international journal of bank marketing*, 19(7), 276-291.
- Kalyanaram, G., & Little, J. D. C. (1994). An empirical analysis of latitude of price acceptance in consumer package goods. *Journal of Consumer Research*, 408-418.

- Kassim, N. M., & Ismail, S. (2009). Investigating the complex drivers of loyalty in e-commerce settings. *Measuring Business Excellence*, 13(1), 56-71.
- Kenova, V., & Jonasson, P. (2006). *Quality online banking services*. Jönköping University.
- Koskosas, I. (2011). The Pros And Cons Of Internet Banking: A Short Review. *Business Excellence and Management*, 1(1), 49-58.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas.*
- Kuhl, J., & Beckmann, J. (1985). *Action control, from cognition to behavior*. Berlin; New York: Springer-Verlag.
- Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the reasons for resistance to Internet banking: A means-end approach. *International Journal of Information Management*, 27(2), 75-85.
- Lee, J. (2003). *Examining the antecedents of loyalty in a forest setting: Relationships among service quality, satisfaction, activity involvement, place attachment, and destination loyalty*. The Pennsylvania State University.
- Legris, P., Ingham, J., & Collette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & management*, 40(3), 191-204.
- Li, C.-F. (2009). *Extending the Technology Acceptance Model to Investigate the Factors Affecting the User Satisfaction*. Paper presented at the In Internet Banking, BAI2009 International Conference on Business and Information
- Li, Y., Tan, K., & Xie, M. (2002). Measuring web-based service quality. *Total Quality Management*, 13(5), 685-700.
- Liong, L. S., Arif, M. S. M., Tat, H. H., Rasli, A., & Jusoh, A. (2011). Relationship between service quality, satisfaction, and loyalty of Google users. *International Journal of Electronic Commerce*, 2(1).
- Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002). WebQual: A measure of website quality. *Marketing theory and applications*, 13(3), 432-438.
- Lovelock, C., & Gummesson, E. (2004). Whither services marketing? In search of a new paradigm and fresh perspectives. *Journal of Service Research*, 7(1), 20-41.
- Malhotra, N. K., & Peterson, M. (2006). *Basic marketing research : a decision-making approach*. Upper Saddle River, NJ: Pearson/Prentice Hall.

- Mattila, M., Karjaluoto, H., & Pento, T. (2002). Internet banking adoption factors in Finland. *University of Jyväskylä*.
- McKnight, D. H. (2005). Trust in information technology. *The Blackwell Encyclopedia of Management*, 7, 329-331.
- McMullan, R., & Gilmore, A. (2003). The conceptual development of customer loyalty measurement: a proposed scale. *Journal of Targeting, Measurement and Analysis for Marketing*, 11(3), 230-243.
- Mirza, A. P., Beheshti, M. T. H., Wallstrom, A., & Mirza, O. P. (2009). Adoption of internet banking by Iranian consumers: An Empirical investigation. *Journal of Applied sciences*, 9(14), 2567-2575.
- Mohd Shoki Md Ariff, L. O. Y., Ahmad Jusoh, Norhayati Zakuan, Ahmad Ziadi. (2011). Relationship between e-service quality, e-satisfaction, e-loyalty in internet banking *science direct*.
- Molla, A., & Licker, P. S. (2001). E-commerce systems success: An attempt to extend and respecify the DeLone and McLean model of IS success. *Journal of Electronic Commerce Research*, 2(4), 131-141.
- Nadiri, H., Kandampully, J., & Hussain, K. (2009). Zone of tolerance for banks: a diagnostic model of service quality. *The Service Industries Journal*, 29(11), 1547-1564.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 460-469.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 418-430.
- Oliver, R. L. (1999). Whence consumer loyalty? *the Journal of Marketing*, 33-44.
- Oliver, R. L. (2010). *Satisfaction: A behavioral perspective on the consumer*: ME Sharpe Incorporated.
- Oliver, R. L., & DeSarbo, W. S. (1988). Response determinants in satisfaction judgments. *Journal of Consumer Research*, 495-507.
- Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: foundations, findings, and managerial insight. *Journal of Retailing*, 73(3), 311-336.
- Ostrowski, P. L., O'Brien, T. V., & Gordon, G. L. (1993). Service quality and customer loyalty in the commercial airline industry. *Journal of Travel Research*, 32(2), 16-24.

- Page Jr, T. J., & Spreng, R. A. (2002). Difference scores versus direct effects in service quality measurement. *Journal of Service Research*, 4(3), 184-192.
- Parasuraman, A. (2004). Assessing and improving service performance for maximum impact: insights from a two-decade-long research journey. *Performance Measurement and Metrics*, 5(2), 45-52.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (2004). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Retailing: Critical Concepts Bk2*, 64(1), 140.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201-230.
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.
- Parasuraman, A., & Zinkhan, G. M. (2002). Marketing to and serving customers through the Internet: An overview and research agenda. *Journal of the academy of marketing science*, 30(4), 286-295.
- Patterson, P. G., Johnson, L. W., & Spreng, R. A. (1997). Modeling the determinants of customer satisfaction for business-to-business professional services. *Journal of the academy of marketing science*, 25(1), 4-17.
- Petrick, J. F. (2004). The roles of quality, value, and satisfaction in predicting cruise passengers' behavioral intentions. *Journal of Travel Research*, 42(4), 397-407.
- Phillips, D. M., & Baumgartner, H. (2002). The role of consumption emotions in the satisfaction response. *Journal of Consumer Psychology*, 12(3), 243-252.
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet research*, 14(3), 224-235.

- Pitt, L. F., Watson, R. T., & Kavan, C. B. (1995). Service quality: a measure of information systems effectiveness. *MIS quarterly*, 173-187.
- Pont, M., & McQuilken, L. (2005). An empirical investigation of customer satisfaction and loyalty across two divergent bank segments. *Journal of Financial Services Marketing*, 9(4), 344-359.
- Pritchard, M. P., & Howard, D. R. (1997). The loyal traveler: Examining a typology of service patronage. *Journal of Travel Research*, 35(4), 2-10.
- Ram, S., & Jung, H. S. (1991). How product usage influences consumer satisfaction. *Marketing Letters*, 2(4), 403-411.
- Rayman-Bacchus, L., & Molina, A. (2001). Internet-based tourism services: business issues and trends. *Futures*, 33(7), 589-605.
- Reibstein, D. J. (2002). What attracts customers to online stores, and what keeps them coming back? *Journal of the academy of marketing science*, 30(4), 465-473.
- Reichheld, F. F., & Schefter, P. (2000). E-loyalty: your secret weapon on the web. *Harvard business review*, 78(4), 105-113.
- Reichheld, F. F., & Teal, T. (2001). *The loyalty effect: The hidden force behind growth, profits, and lasting value*: Harvard business press.
- Ribbink, D., Van Riel, A. C. R., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. *Managing service quality*, 14(6), 446-456.
- Rodgers, W., Negash, S., & Suk, K. (2005). The moderating effect of on-line experience on the antecedents and consequences of on-line satisfaction. *Psychology & Marketing*, 22(4), 313-331.
- Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, 69(2), 193-215.
- Sadiq Sohail, M., & Shanmugham, B. (2003). E-banking and customer preferences in Malaysia: An empirical investigation. *Information Sciences*, 150(3), 207-217.
- Saha, P., & Zhao, Y. (2005). Relationship between online service quality and customer satisfaction. *A study in Internet Banking. Sweden: Lulea University of Technology*.
- Sambandam, R., & Lord, K. R. (1995). Switching behavior in automobile markets: a consideration-sets model. *Journal of the academy of marketing science*, 23(1), 57-65.

- Santos, J. (2003). E-service quality: a model of virtual service quality dimensions. *Managing service quality*, 13(3), 233-246.
- Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation. *international journal of bank marketing*, 17(7), 324-334.
- Schaupp, L. C., & Bélanger, F. (2005). A conjoint analysis of online consumer satisfaction. *Journal of Electronic Commerce Research*, 6(2), 95-111.
- Scotti, D. J., Harmon, J., & Behson, S. J. (2007). Links among high-performance work environment, service quality, and customer satisfaction: an extension to the healthcare sector. *Journal of healthcare management/American College of Healthcare Executives*, 52(2), 109.
- Sekaran, U. (2000). *Research methods for business : a skill-building approach*. New York: J. Wiley.
- Sekaran, U. (2003). *Research methods for business : a skill-building approach*. New York: John Wiley & Sons.
- Sekaran, U. (2005). *Research methods for business: A skill building approach*. New York: John Wiley & Sons, Inc.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business : a skill-building approach*. Chichester: Wiley.
- Senger, E., Gronover, S., & Riempp, G. (2002). *Customer web interaction: Fundamentals and decision tree*. Paper presented at the Eighth Americas Conference on Information Systems (AMCIS).
- Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153-175.
- Shao, X. W., & Guo, Y. H. (2000). *E-commerce introduction*. Taipei: Flag Publishing.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 325-343.
- Shneiderman, B. (1998). *Designing the user interface : strategies for effective human-computer-interaction*. Reading, Mass: Addison Wesley Longman.

- Sirohi, N., McLaughlin, E. W., & Wittink, D. R. (1998). A model of consumer perceptions and store loyalty intentions for a supermarket retailer. *Journal of Retailing*, 74(2), 223-245.
- Siu, N. Y.-M., & Mou, J. C.-W. (2005). Measuring service quality in internet banking: the case of Hong Kong. *Journal of International Consumer Marketing*, 17(4), 99-116.
- Siu, N. Y. M., & Mou, J. C. W. (2005). Measuring Service Quality in Internet Banking. *Journal of International Consumer Marketing*, 17(4), 99-116.
- Sivakumar, K., & Raj, S. (1997). Quality tier competition: How price change influences brand choice and category choice. *the Journal of Marketing*, 71-84.
- Skogland, I., & Siguaw, J. A. (2004). Are your satisfied customers loyal? *Cornell Hotel and Restaurant Administration Quarterly*, 45(3), 221-234.
- Spreng, R. A., & Chiou, J. (2002). A cross-cultural assessment of the satisfaction formation process. *European Journal of marketing*, 36(7/8), 829-839.
- Spreng, R. A., & Page Jr, T. J. (2003). A Test of Alternative Measures of Disconfirmation*. *Decision Sciences*, 34(1), 31-62.
- Stewart, K. J. (1999). *Transference as a means of building trust in World Wide Web sites*. Paper presented at the Proceedings of the 20th international conference on Information Systems.
- Stone, R. N., & Granhaug, K. (1993). Perceived risk: further considerations for the marketing discipline. *European Journal of marketing*, 27(3), 39-50.
- Storbacka, K., Strandvik, T., & Grönroos, C. (1994). Managing customer relationships for profit: the dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21-38.
- Strauss, J., Frost, R., El-Ansary, A., & Ei-Ansary, A. (2001). *E-marketing*: Prentice Hall Upper Saddle River, NJ.
- Sweeney, J., & Swait, J. (2008). The effects of brand credibility on customer loyalty. *Journal of Retailing and Consumer Services*, 15 179-193.
- Tang, Z. T., & Liu, W. L. (2002). *E-commerce and Internet marketing*: Taipei: Dong Qiao Infonnation Limited Co.
- Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163-178.

- Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: an extension. *Journal of marketing research*, 204-212.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Wang, W., & Benbasat, I. (2005). Trust in and adoption of online recommendation agents. *Journal of the Association for Information Systems*, 6(3), 72-101.
- Wang, Y., Tang, T., & Tang, J. E. (2001). An instrument for measuring customer satisfaction toward web sites that market digital products and services. *Journal of Electronic Commerce Research*, 2(3), 89-102.
- Weathers, D., & Makienko, I. (2006). Assessing the relationships between e-tail success and product and Web site factors. *Journal of interactive marketing*, 20(2), 41-54.
- Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research*, 84-91.
- Wolfenbarger, M., & Gilly, M. C. (2001). Shopping online for freedom, control, and fun. *California Management Review*, 43(2), 34-55.
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183-198.
- Wu, Y. L., Chang, M. C. S., Yang, P. C., & Chen, Y. J. (2008). *The Use of E-SQ to establish the internet bank service quality table*. Paper presented at the Industrial Engineering and Engineering Management, 2008. IEEM 2008. IEEE International Conference on.
- Yan, Y., & Fengjie, J. (2009). *The Empirical Study on the Influencing Factors of Customers' E-Loyalty*. Paper presented at the Management and Service Science, 2009. MASS'09. International Conference on.
- Yang, H. E., & Yeh, K. H. (2006). The roles of service quality and mediating factors in a customer behavioural intentions model. *International Journal of Services Operations and Informatics*, 1(1), 38-53.
- Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction: a content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management*, 15(3), 302-326.

- Yang, Z., Jun, M., & Peterson, R. T. (2004). Measuring customer perceived online service quality: scale development and managerial implications. *International Journal of Operations & Production Management*, 24(11), 1149-1174.
- Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2, 31-46.
- Yoon, S. J. (2002). The antecedents and consequences of trust in online-purchase decisions. *Journal of interactive marketing*, 16(2), 47-63.
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26(1), 45-56.
- Zavareh, F. B., Ariff, M. S. M., Jusoh, A., Zakuan, N., Bahari, A. Z., & Ashourian, M. (2012). E-Service Quality Dimensions and Their Effects on E-Customer Satisfaction in Internet Banking Services. *Procedia-Social and Behavioral Sciences*, 40, 441-445.
- Zeithaml. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *the Journal of Marketing*, 2-22.
- Zeithaml. (2002). Service excellence in electronic channels. *Managing service quality*, 12(3), 135-139.
- Zeithaml, Bitner, M. J., & Gremler, D. D. (2006). *Service Marketing: Integrating Customer Focus Across The Firm*-4/E.
- Zeithaml, Parasuraman, A., & Malhotra, A. (2000). e-Service quality: definition, dimensions and conceptual model. *Marketing Science Institute, Cambridge, MA, working paper*.
- Zeithaml, V. A., & Bitner, M. J. (2000). *Services marketing : integrating customer focus across the firm*. Boston, Mass. [u.a.]: Irwin/McGraw-Hill.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the academy of marketing science*, 30(4), 362-375.
- Zeithaml., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *the Journal of Marketing*, 31-46.
- Zeithaml., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the academy of marketing science*, 30(4), 362-375.

- Zhang, X., & Prybutok, V. R. (2005). A consumer perspective of e-service quality. *Engineering Management, IEEE Transactions on*, 52(4), 461-477.
- Zikmund, W. G., Carr, B. J. B. J. C., Griffin, M., Babin, B. J., & Carr, J. C. (2000). *Business research methods* (Vol. 6): Dryden Press Fort Worth, TX.