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Combining Theory of Commitment-Trust and Electronic Commerce Success Models to Predict the Stickiness Tendency of Customer (Case Study: Customers of Online Shops in Tehran)

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ABSTRACT

This study aimed to investigate the relationship between information quality variables, system quality, service quality, perceived value, customer satisfaction, trust, relationship commitment and willingness to customer stickiness in the e-commerce environment. This study is practical based on research objective and descriptive -survey research based on data collection. The statistical population of this study were clients of online stores in Tehran that 358 of them participated in the study. In the present study to test the hypothesis and measurement pattern by modeling structural equation with method of partial least squares SMARTPLS software is used. The results show that the impact of information quality, system quality and service quality on perceived value is positive and significant. The impact of system quality and service quality on customer satisfaction is positive and significant but impact of information quality on customer satisfaction is not significant. The impact of perceived value and customer satisfaction on trust is positive and significant. The impact of perceived value, customer satisfaction and trust on relationship commitment is significant positive. The impact of customer satisfaction, trust, perceived value and relationship commitment on stickiness is positive and significant. Overall Results approve relationship between information quality, system quality, service quality, perceived value, customer satisfaction, trust, relationship commitment and willingness to customer stickiness in e-commerce.

Keywords: Information quality, system quality, service quality, perceived value, customer satisfaction, trust, commitment, communication, tendency to stickiness.

1. INTRODUCTION

Rapid changes in today's world has faced firms and organizations with the multiple challenges. But in the meantime, firms and organizations are successful that created the opportunity to their advantage using

modern management tools and techniques. Today, e-commerce is one of the important issues in business. E-commerce Include transactions around for organizations and individuals based on information technology. E-commerce promotes communication and economic openness in the national and international levels, changing the business methods and transform the traditional markets to newer forms (Kim et. al., 2010). E-commerce is a type of trading that not much of its life goes and dates back to the '70s that buying and selling of products or services began using the Internet and other computer networks. Advent of the Internet and various commercial sites from the same year, e-commerce was created in the true sense. Applications of Internet have been developed widely since its advent. Internet with its different components, especially the world-wide web provides new set of tools and methods for doing business, especially in the field of commercial operations, sales, advertising service and training. (Chen, Rungruengsamrit, Rajkumar 2013). From the perspective of the economic cooperation and development organization, Ecommerce is the buying and selling of goods and services between companies, individuals, governments and other public and private sectors So that the buying and selling is guided through computer networks (Shim et. al., 2013). In another definition e-commerce is the transfer of information, goods and services or payment by electronic devices, the use of technology to automate transactions and business processes, online trading of information and products (Barons and Hunt 2013). Internet-based e-commerce environment, provides customers with possibility to search for information and purchase goods and services through direct link with online stores. Online buying is not based on real experience of buying goods, but also based on aspects such as image, shape, qualitative information and advertising of the product (Javanmard and Soltanzadeh 2009). Review of past research shows that any research has not examined the relationship between information quality, system quality, service quality, perceived value, customer satisfaction, trust, relationship commitment and willingness to customer stickiness in e-commerce environment, particularly in Iran in the framework of the causal model and there is a shortage of research in this field. So this study investigates the relationship between variables mentioned above the screw. The literature review is discussed in the following.

2. LITERATURE REVIEW

Information Quality

Information technology tools are used to increase the efficiency and effectiveness of providing information (Gangoli and Roy 2010). Relevant, timely and reliable information helps customers to have a safe and effective decision making (Hsieh 2013). Therefore, the quality of information plays an important role in creating a positive overall attitude for customer towards the company (Jaiswal et. al., 2010). In fact, the service provider facilitates high levels of data quality. (Kuak, Taichon and Jabarajakirsy 2016). Information quality refers to functions of data features such as accuracy, integrity, reliability and being on time that reflects one of the aspects of quality that matches consistent information characteristics of consumer demands. (Zheng et. al., 2013). The quality of information provides better understanding of the decision making related to strategic and operational business processes. (Chayisovamunlekoll and Manmart, 2014). In fact, access to accurate, perfect and credible market information guarantee that decisions based on such information to create perceived value by the client will be effective (Mity, 2014) and also mistakes that may have occurred with increasing data quality leads to reductions such as reducing their costs that improves value for the customer. Accurate, perfect, credible and timely market information has a positive relationship with information advantage of company (Fun 2013). Studies show that the quality of information has an

impact on perceived value and customer satisfaction (Wang 2008, Choy et. al., 2008, Yon and Kim, 2009, Miranda-Gomisiyo et. al., 2012, Peter, 2012, Wang et. al., 2013, Wang at al., 2016).

System Quality

System quality reflects the interface design, ease, speed, competence and effectiveness of loading/storing data (Wang, 2015). Correct definition of quality is to meet and surpass the expectations of users (Coleman et. al., 2014). System quality is one of the important factors of technology success. System quality indicates that the system is designed to match users' aims from informational needs and adhere to the relevant standards (Gvrla, Svmrz and Wong, 2010). System quality also reflects the quality of information processing, providing key features and functions that are user friend, easy to learn and easy to maintain (Wang, 2015). Providing customers' expectations of quality systems occurs by providing attractive demonstration, user-friendly interface, entertaining needs of users to change and providing stakeholder satisfaction (Almamary and ShamsAldin, 2015; Gurla, Sumerz and Wong, 2010). Studies show that the system quality has impact on perceived value and customer satisfaction (Wang, 2008; Choi et. al., 2008; Yoon and Kim, 2009; Miranda-Gomisiyo et. al., 2012; Peter, 2012; Wang and et. al., 2013; Wang et. al., 2016).

Quality of Service

Service quality is differentiating factor and the most powerful competitive weapons (Wong and Sohal, 2003). Service quality is defined as a universal attitude or judgment about the predominance of a service that is caused by comparison between customer expectations and their perception of the actual performance of services (Harrison, 2000; Dubai, 2015). E-services is defined web services passed through the internet to customers (M, Sojak and Rahman, 2016; Zhuang and Babin, 2015). High quality of service is considered as the key to success in a competitive market of services. Quality of service is dependent on two factors: expected service and perceived service. Groner (1984) states that previous experiences related to a service can affect a customer expectations. While the service perceived by customers' is based on customers perceptions of service (Parasuraman et. al., 1988; Karjaloto et. al., 2015). Studies showed that service quality has impact on perceived value and customer satisfaction (Wang, 2008; Choi et. al., 2008; Yoon and Kim, 2009; Miranda-Gomisiyo et. al., 2012; Peter, 2012; Wang and et. al., 2013; Wang et. al., 2016).

Perceived Value

One of the main challenges faced by marketing managers, is to continuously improve the value of their products or services through increasing benefits of the product or service or reducing the costs. Because the superior value of a product or service is an important competitive advantage for the organization and induces profitability and customer satisfaction (Choi et. al., 2004). Customer value in marketing is defined by customer assessment of the costs and benefits of buying a product or service (Tessa and Agarwal, 2000; Zeithaml, 1988). Customers primarily tend to consume services that reduce costs for them or have income for them (Dodds et. al., 1991). Lin et. al., (2005) argue that customer value is critical for organizations and therefore, in recent years, has become a spotlight of marketing strategies. Therefore, the primary objective of companies should focus on continuous improvement of customer related values and use of mechanisms that increase customer's value for that brand (Payne et. al., 2000). Important consequences of marketing

on customer value are increased customer satisfaction (Fornell et. al., 1996; Lam et. al., 2004; Wang et. al., 2004; Wang et. al., 2016) the commitment and trust of customers (Grabnr-Crowther, 2004; Singh, 2000; Wang et. al., 2016) and stickiness and word of mouth advertising (Zhang et. al., 2016).

Customer Satisfaction

Happiness is a pleasant or unpleasant feeling of a person arises comparing his mental function to expectations (Cutler et. al., 2014). In the process of new business, obtaining customer satisfaction has a vital position in organizational goals and senior executives know well that the success in reaching the goals of the organization is at stake of customer's satisfaction. Unlike the past customers have opportunity to find a place that lets customers order products and services from all around the world with various numbers and kinds and then compare and select the most favorable of them. In addition, the right to decide who and how to contact them to obtain as well. Given the competitive environment, customer satisfaction is most closely associated challenges stems. The institutions and organizations have to resort to new marketing strategies in order to satisfy the customers. Additionally, one of the principles in organizations is customer orientation and customer satisfaction because customer are the backbone for organizations that are looking for major improvements in the way of their progress. Studies conducted have shown that customer satisfaction is one of the main determiners of commitment, trust and the desire to stickiness of clients (Garbarino and Johnson, 1999; Flavyan et. al., 2006; Lee et. al., 2007; Mikol- Romero, Kapler-Giner and Adam - Sanchez, 2014; Wang et. al., 2016).

Trust

Trust have been one of the underlying concepts for the transactions and exchanges in every period of history. Customer trust is the willingness of the customer to ensure the brand abilities and capabilities in carrying out the tasks (Chaudhary, 2001; El Manstrly, 2015). Morgan et. al., (1994) defined trust as perception of certainty in the exchange, reliability and proper partner and believe that trust is the basis of commitment relationship. They have expressed trust is achieved when one side is assured about truth of other side. Barry (1991) states that the relationship based marketing is created on trust. Trust is also an important factor in creating and improving the quality of relationship based on the promises and fulfillment of them (Hewett and Beardn, 2001).

The structure of the trust specifically generates interest in relationship based marketing. Several researchers have expressed trust as a main factor contributing and developing successful customer relationship and customer loyalty. They state that the client needs to feel secure in their relationship with the service provider and ensure that their interaction with the service provider is sufficiently reliable so they rely on the other side (Geffen and Strub, 2003). Studies have shown that customer trust is one of the main determinants of customer commitment and desire to stickiness (Motahari Nejad et. al., 2014; Micol-Romero, Kapler-Giner and Adam - Sanchez, 2014; Wang et. al., 2016).

Customer Commitment

Commitment is one of the key variables that has a significant effect on the decision to purchase (Homberg and Greeng, 2001). Customer commitment is psychological state that implies a positive attitude towards the

brand and the desire to maintain a relationship with its value (Avanchitzky et. al., 2006). Brand commitment includes continuous commitment and emotional commitment. Continued commitment to a brand is defined as weak consumer tendency toward a brand. Continued commitment rooted in economic costs, variable costs and scarcity has appropriate replacements for the brand. Emotional commitment represents an emotional bond with a brand that originates from identity, shared values, attachment and trust. This emotional bond has a considerable impact on consumer behavior, such as repeatative purchase from brand and stickiness (Lee et. al., 2006; Wang et. al., 2016).

Tendency to Stickiness

Stickiness is one of the important abilities of companies to attract and retain customers (Zoot et. al., 2000). Lin et. al., (2010) defined stickiness as time spent on social networks in one company. Lane (2007) argues that stickiness is underlying desires and unconscious refers of customers to visit the social networking company. In general, most experts defined stickiness based on the users visit time and retaining users. So stickiness has important role in maintaining and loyalty to the company's clients (Wang et. al., 2016).

Conceptual Model of Research

According to the theoretical literature and theoretical framework derived from a research background conceptual model is illustrated in Figure 25.1. As you can see. In this model, data quality, system quality and service quality are considered as independent variables and perceived value, customer satisfaction, trust and relationship commitment as mediator variables and desire to stickiness is considered as the dependent variable. According to the hypothesis of this research is as follows:

- Hypothesis 1: The quality of information has a positive effect on perceived value.
- Hypothesis 2: The quality of information has a positive impact on customer satisfaction.
- Hypothesis 3: System quality has a positive impact on perceived value.
- Hypothesis 4: System quality has a positive impact on customer satisfaction.
- Hypothesis 5: Service quality has a positive impact on perceived value.
- Hypothesis 6: Service quality has a positive impact on customer satisfaction.
- Hypothesis 7: Perceived value has a positive impact on customer satisfaction.
- Hypothesis 8: Perceived value has a positive impact on relationship commitment.
- Hypothesis 9: Perceived value has a positive impact on Trust.
- Hypothesis 10: Customer satisfaction has a positive impact on relationship commitment.
- Hypothesis 11: Customer satisfaction has a positive effect on confidence.
- Hypothesis 12: Trust has a positive impact on relationship commitment.
- Hypothesis 13: Trust has a positive impact on the tendency to stickiness.
- Hypothesis 14: The relationship commitment has a positive impact on the tendency to stickiness.

Perceived value: In order to measure the Perceived value the questionnaires of Wang et. al., (2008) was used. It is a 3-item questionnaire, items are scored based on five points Likert scale (1 = strongly disagree to strongly agree = 5).

Customer satisfaction: In order to measure the customer satisfaction the questionnaires of Wang et. al., (2008) was used. It is a 3-item questionnaire, items are scored based on five points Likert scale (1 = strongly disagree to strongly agree = 5).

Relationship commitment: In order to measure the relationship commitment the questionnaires of Wang et. al., (2016) was used. It is a 4-item questionnaire, items are scored based on five points Likert scale (1 = strongly disagree to strongly agree = 5).

Trust: In order to measure the trust the questionnaires of Wang et. al., (2016) was used. It is a 7-item questionnaire that tests three dimensions of honesty (2 items), ability (2 items) and benevolence (3 items). Items are scored based on five points Likert scale (1 = strongly disagree to strongly agree = 5).

Tendency to stickiness: In order to measure the tendency to stickiness the questionnaires of Wang et. al., (2006) was used. It is a 3-item questionnaire, items are scored based on five points Likert scale (1 = strongly disagree to strongly agree = 5).

Validity and Reliability of Study Tools (Measurement Pattern Test)

Measurement pattern test include reliability (internal consistency) and validity of structures and tools of research. To investigate the reliability of structures and Frenel and Locker (1981) suggest three criteria that includes: (1) the reliability of any of the items, (2) composite reliability of each of the structures (3) average of extracted variance.

The reliability of each of the items with 6/0 and more loading factor for each item in the statements of confirmatory factor analysis indicates the suitability of any of its items. Also item loading factors should be significant at least at the level of 01/0 (Geffen and Straubs, 2005). To calculate the statistic t-test to determine significance of factor loadings Boot Strub tests (With 500 Subsampling) was used.

To evaluate the combination reliability of each structure Dillon – Goldstein coefficient (ρ_c) was used.

Acceptable values of ρ_c should be 0/7 or more. The third criterion is to investigate reliability, average extracted variance (the Frenel and Locker, 1981). Factor loadings in Table 1, ρ_c , and AVE variables are provided. This table represents reliability values-sufficient and appropriate structures. Frenel and Locker recommend values of 0/5 and further. This means that structure explains about 50 percent or more of the variance of their markers (Chin, 1988). Factor loadings, ρ_c , and AVE of research variables are provided in Table 25.1. This table represents adequate and appropriate reliability values of structures.

To check the reliability or divergent validity of structures, Chin (1988), recommends two criteria, 1 items of a structure must have the highest load factor on its own structure. It means that they have few temporary load on other structures. Giffen and Straubs (2005) suggest that the factor loadings of each item on its own structures must be at least 0.1 greater than factor load of same item on other structures. Second criterion is that square root of AVE for a structure must be greater than the correlation of structure with other

Table 25.1
load factor, the composite reliability and average extracted variance of research variables

Item	Load factor	Item	Load factor	Item	Load factor	Item	Load factor	Item	Load factor	Item	Load factor	Item	Load factor
Information 1	78/0	System 1	66/0	Service 1	63/0	Value 1	70/0	Satisfaction 1	68/0	Commitment 1	64/0	Honesty	73/0
Information 2	72/0	System 2	85/0	Service 2	76/0	Value 2	77/0	Satisfaction 2	71/0	Commitment 2	82/0	Benevolence	88/0
Information 3	77/0	System 3	80/0	Service 3	82/0	Value 3	82/0	Satisfaction 3	74/0	Commitment 3	81/0	Ability	92/0
				Service 4	68/0					Commitment 4	75/0		
ρ_c	80/0		82/0	Service 5	67/0						84/0		88/0
AVE	57/0		60/0		51/0		59/0		51/0		58/0		71/0
													75/0
													51/0

Note: All factor loadings were significant and higher-level 01/0.

structures. This indicates that the correlation between the structure and its markers is more than its correlation with other structures. Temporary item loads on research structures have been reported in Table 25.2.

Table 25.2
Cross factor loadings to check the validity of questionnaires

<i>Question/ Variable</i>	<i>Information Quality</i>	<i>System Quality</i>	<i>Service Quality</i>	<i>Perceived value</i>	<i>Customer satisfaction</i>	<i>Relationship commitment</i>	<i>Trust</i>	<i>Tendency to stickiness</i>
Information 1	0.78	0.37	0.56	0.43	0.43	0.51	0.36	0.47
Information 2	0.72	0.33	0.46	0.32	0.33	0.37	0.33	0.37
Information 3	0.77	0.52	0.31	0.55	0.52	0.50	0.54	0.51
System 1	0.42	0.66	0.46	0.46	0.39	0.46	0.46	0.44
System 2	0.47	0.85	0.38	0.53	0.56	0.54	0.53	0.52
System 3	0.40	0.80	0.21	0.51	0.55	0.55	0.54	0.50
Services 1	0.34	0.20	0.63	0.29	0.34	0.30	0.30	0.34
Services 2	0.56	0.31	0.76	0.37	0.34	0.38	0.35	0.38
Services 3	0.53	0.31	0.82	0.44	0.43	0.43	0.39	0.39
Services 4	0.54	0.39	0.68	0.45	0.48	0.49	0.42	0.49
Services 5	0.45	0.34	0.67	0.41	0.38	0.41	0.39	0.34
Value 1	0.55	0.41	0.52	0.70	0.44	0.46	0.45	0.38
Value 2	0.36	0.42	0.42	0.77	0.50	0.48	0.67	0.43
Value 3	0.47	0.63	0.30	0.82	0.51	0.54	0.51	0.51
Satisfaction 1	0.33	0.25	0.47	0.46	0.68	0.38	0.45	0.33
Satisfaction 2	0.38	0.36	0.49	0.42	0.71	0.44	0.47	0.39
Satisfaction 3	0.49	0.57	0.28	0.56	0.74	0.57	0.52	0.51
Commitment 1	0.58	0.39	0.48	0.50	0.48	0.64	0.46	0.50
Commitment 2	0.54	0.51	0.39	0.54	0.64	0.82	0.53	0.58
Commitment 3	0.54	0.55	0.34	0.57	0.59	0.81	0.58	0.50
Commitment 4	0.57	0.47	0.38	0.57	0.50	0.75	0.58	0.38
Honesty	0.55	0.54	0.41	0.51	0.54	0.53	0.88	0.59
Benevolence	0.40	0.46	0.52	0.59	0.48	0.43	0.73	0.40
Ability	0.48	0.54	0.43	0.53	0.61	0.55	0.92	0.55
Stickiness 1	0.39	0.32	0.49	0.31	0.37	0.35	0.37	0.67
Stickiness 2	0.43	0.30	0.50	0.30	0.33	0.30	0.33	0.64
Stickiness 3	0.49	0.55	0.32	0.55	0.61	0.59	0.50	0.83

According to Table 25.2 all aspects have the highest load factor on their own structures and the minimum distance between factor loading is related to their own structure that is more than 0/1 and shows that the studied structures adequately reliable. Table 25.3 shows the results of the correlation and the second validity criterion which is the square root of the average extracted variance.

According to Table 25.3 the square root of the average extracted variance all of all research variables is more than their correlation with other variables. The second criterion is established to investigate the validity of the variables. In addition the numbers under correlation matrix diameter is reported to investigate the correlation between variables. As can be seen the correlation between all variables in the $p < 0.01$ is positive and significant.

Table 25.3
Matrix of correlation and second root of mean extracted variance of study variables

<i>Variable</i>	1	2	3	4	5	6	7	8
Information quality	75/0							
System quality	**55/0	77/0						
Service Quality	**68/0	**44/0	71/0					
Conceived value	**59/0	**64/0	**56/0	77/0				
Customer satisfaction	**58/0	**65/0	**55/0	**58/0	71/0			
Relationship commitment	**63/0	**61/0	**57/0	**64/0	**63/0	76/0		
Trust	**61/0	**62/0	**52/0	**60/0	**64/0	**63/0	84/0	
Tendency to stickiness	**60/0	**59/0	**55/0	**58/0	**61/0	**59/0	**60/0	71/0

Note: The numbers on the diameter of the correlation matrix is the square root of the average extracted variance.

Research Findings

In the present study the method structural equation modeling with method of least squares used to test measurement pattern and hypothesis of research. SMARTPLS software was used to analysis of data for testing model.

Descriptive indicators (mean, standard deviation) of research variables are reported in Table 25.4.

Table 25.4
Mean, Standard Deviation of research variables

<i>Variable</i>	<i>Mean</i>	<i>Standard Deviation</i>
Information quality	06/3	80/0
System quality	96/2	81/0
Service Quality	19/3	76/0
Conceived value	02/3	88/0
Customer satisfaction	91/2	82/0
Relationship commitment	94/2	84/0
Trust	83/2	84/0
Tendency to stickiness	18/3	82/0

To predict the customer’s tendency to stickiness, the conceptual model was investigated through structural equation modeling approach and regard to research hypothesis, partial least squares method was used to estimate the pattern. The Bootstrap method (with 500 sub-sample) was used to calculate the statistical values of T to determine the significance of path coefficient. Figure 25.2 shows the relationship between research variables in the test model. According to this figure, all the path coefficients are positive and significant. The numbers in the circles are explained variance of research variables.

In Table 25.5 path coefficients and the explained variance of research variables have been reported. The numbers in parentheses are the T coefficients.

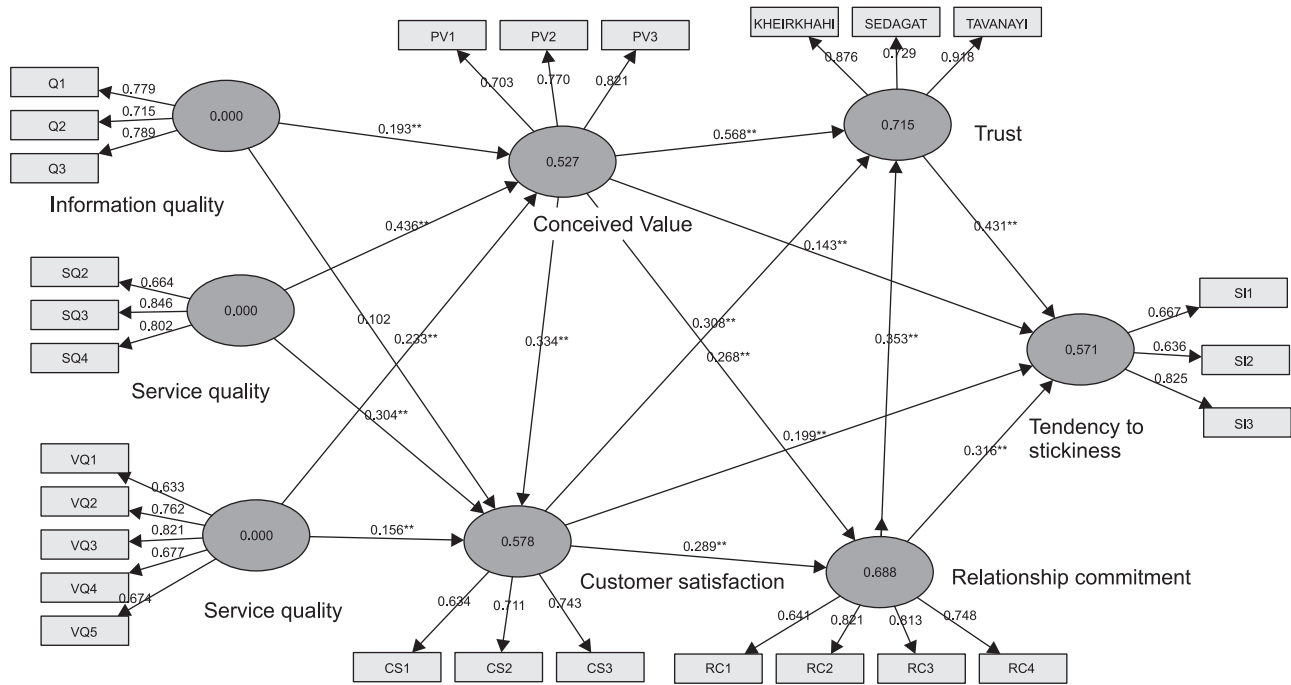


Figure 25.2: Test pattern for customer tendency to stickiness

Table 25.5
Coefficient path of explained variance

<i>Variables</i>	<i>Path coefficients</i>	<i>T coefficients</i>	<i>Explained variance</i>
To the perceived value of:			
Information quality	** 19/0	309/3	53/0
System quality	** 44/0	598/10	
Service Quality	** 23/0	029/4	
To customer satisfaction:			
Information quality	10/0	94/1	58/0
System quality	** 30/0	156/6	
Service Quality	** 17/0	209/3	
To commitment of communication:			
Conceived value	** 27/0	415/5	69/0
Conceived value	** 29/0	270/6	
Trust	** 35/0	777/7	
To the trust of:			
Conceived value	** 57/0	896/15	71/0
Conceived value	** 35/0	388/10	
To the tendency to stickiness of:			
Conceived value	* 14/0	117/2	57/0
Conceived value	** 20/0	598/3	
Trust	** 43/0	272/6	
Relationship commitment	** 32/0	617/4	

* $p < 0.05$, ** $p < 0.01$

As shown in Table 25.5. Effect of information quality ($\beta = 0/19$), Quality Systems ($\beta = 0/44$) and quality of service ($\beta = 0/23$) on perceived value at the level of ($P > 0.01$) is positive and significant. The effect of system quality ($\beta = 0.03$) and quality of service ($\beta = 0/17$) on customer satisfaction in level ($P > 0.01$) is positive and significant but its impact on customer satisfaction is not significant. The impact of perceived value ($\beta = 0/57$) and customer satisfaction ($\beta = 0/35$) on trust at level of ($P < 0.01$) is positive and significant. The impact of perceived value ($\beta = 0/27$), customer satisfaction ($\beta = 0/29$) and trust ($\beta = 0/35$) on communications commitment at level of ($P < 0.01$) is positive and significant. The impact of customer satisfaction ($\beta = 0/02$), trust ($\beta = 0/43$) and relationship commitment ($\beta = 0/32$) on the stickiness at level of ($P = 0.1$) is positive and significant. The impact of perceived value ($\beta = 0/14$) on stickiness at level of $0/05$ is positive and significant. According to Table 25.4, 57% of the variance tendency to stickiness, 71% of the variance in trust, 69 % of variance in relationship commitment, 58% of variance in customer satisfaction and 53% of the variance in perceived value is explained by the model. There are procedures to verify the validity of the model in PLS. These methods are called cross validation include share validity investigating index and redundant or redundancy check index. Share index measures the quality of the measurement model in each block. Redundant index that is also referred to as the Q2 Aston-Geysar, taking into account the measurement model, measures quality of structural model for each endogenous block. Positive values of these indexes indicates appropriate and acceptable quality of the measurement and structural models (Tann House et. al., 2005). As seen in Table 6 positive share validity and reliability of redundant values for all variables in this study is indicator of appropriate and acceptable quality of measurement and structure models.

Table 25.6
Explained variance, Share and redundancy reliability of variables

<i>Research variables</i>	Q^2 (CV-Redundancy)	<i>CV- Communality</i>
Information quality	–	570/0
System quality	–	599/0
Service Quality	–	513/0
Conceived value	113/0	586/0
Customer satisfaction	054/0	508/0
Relationship commitment	190/0	576/0
Trust	423/0	714/0
Tendency to stickiness	091/0	51/0

In addition to the above indices, the overall fit index of pattern in PLS is GOF index and it can be used totally to check the validity or quality of the PLS. The index examines and tests overall forecasting ability of the model in predicting endogenous latent variables and shows if they have been successful or not (Abbas-Zadeh et. al., 2012). In the present study test pattern absolute fit index GOF, was obtained $0/59$ that indicates proper fitness of tested pattern.

4. DISCUSSION AND CONCLUSION

This study aimed to investigate the relationship between information quality, system quality, service quality, perceived value, customer satisfaction, trust, relationship commitment and tendency to customer stickiness using structural equation. Structural equation modeling results showed that the proposed model fitted well

to the data of this study can explain 57% of the variance of tendency to stickiness, 71% of the variance in trust, 69 % of variance in relationship commitment, 58% of variance in perceived value and 53 % of the variance in customer satisfaction. The results showed that information quality has a significant and positive impact on perceived value. This finding is consistent with results of Wang (2008); Choi et. al., (2008); Yoon and Kim (2009), Peter (2012); Wang et. al., (2013) and Wang et. al., (2016). To explain this finding one can say that if the online store provide adequate, up-to-date, comprehensive and relevant information to customers it will increase customer perceived value. The results showed no significant effect of information quality on customer satisfaction. Therefore, the quality of information does not have significant effect on customer satisfaction. The results showed that the system quality has a positive and significant impact on perceived value and customer satisfaction. This finding is consistent with results of previous studies by Wang (2008); Choi et. al., (2008); Yoon and Kim (2009), Peter (2012); Wang et. al., (2013) and Wang et. al., (2016). To explain these findings can be said that if the website's of online stores are easy to use, interactions with users are friendly in these web sites, skills required to use websites will be easy and users can easily find and use the services they need will increases the perceived value and customer satisfaction from websites of online stores. The results showed that service quality has a positive and significant impact on perceived value and customer satisfaction. This finding is consistent with results of previous studies by Wang (2008); Choi et. al., (2008); Yoon and Kim (2009), Peter (2012); Wang et. al., (2013) and Wang et. al., (2016). This finding suggests that if good service is provided by the company website and provide a positive effect on the vision and believe of customers about quality of service, customer will perceive the brand as a valuable brand. Quality of service makes the satisfaction of customers rise or fall in fact implementation ability and service delivery in a promised, convenient, accurate, reliable and appropriate way to the customer rises perceived value from services. Therefore, since consumers are always looking for providers who provide far better goods or services managers of such organizations should pay attention to the importance of employee role in providing service quality and customer satisfaction to increase their perceived value in the eyes of customers. The results showed that perceived value has significant and positive impact on customer satisfaction, relationship commitment and trust. This finding is consistent with results of previous studies by Fornell (1996), Lam et. al., (2004); Grabnr-Crowther (2004) and Wang et. al., (2016). In accordance with these findings, whatever the value of a product or service to consumers is more, commitment and trust will be placed on customer's connection with the Company. Hansen et. al., (2008) indicates that offering the best possible value to customers is important for business services in today's competitive market. Companies that have the ability to provide valuable products and service in terms of customer's view will gain a major competitive advantage. Thus, both managers and researchers should focus and care on how to assess and insist on a service offered to customers.

The results showed that customer satisfaction has a positive and significant impact on relationship commitment and trust. This finding is consistent with results of preceding studies by Garbarino and Johnson (1999); Flavyan et. al., (2006); Lee et. al., (2007); Micol-Romero, Kaplyr-Gynr and Adam - Sanchez (2014) and Wang et. al., (2016). This finding shows when customers are satisfied with the company services, their expectations were met, have satisfying experience of company services involved, staff provide accurate information about how to provide customer service, to meet the demands of customers, and company services have good quality commitment and trust of customers to the company will increase. So satisfaction, pleasant arising from awareness to a comfortable position is usually tied to satisfaction of certain specific desires. If individuals achieve their desired goals and objectives they will be satisfied (Payndani, 2007) and

therefore commitment and trust of customers to the company will increase. The results showed that trust has a significant positive influence on relationship commitment and tendency to stickiness. This finding is consistent with results of preceding studies by MotahariNejad et. al., (2014), Bajalan, Mansouri and Shabani (2014), Micol-Romero, Kaplir-Giner and Adam - Sanchez (2014) and Wang et. al., (2016). To explain this finding can be said that the structure of the trust is specifically proposed to generate interest in relationship marketing across the world. Trust is contributing and developing factor for successful customer relationship and customer loyalty. Customer needs a sense of security in his relationships with service provider and ensured customer relationship with a service provider will cause relationship commitment and willingness of the customer to use the services of the company. the company commitment to their promises are true customers commitment to use the company's services increases. Brand credibility is safe preservative agent for the customer that will cause the product or service to be developed, sold and promoted. If the trust relationship formed between the client and the company it will have potential for mutual benefits. Therefore it can be concluded that trust is an important factor in the maintenance and customer commitment to use the company services.

The results showed a positive and significant impact of relationship commitment on tendency to stickiness. This finding is consistent with results of preceding studies by Lee et. al., (2006) and Wang et. al., (2016). Explaining impact of commitment on stickiness tendency, if customers feel emotional attachment to brand and brand has many personal meaning for them and they have strong sense of belonging to their brand, and feel that they can't change their current brand, and they are not able to change the current brand due to commitment will increase tendency to stickiness. The results approved the relationship between information quality, system quality, service quality, perceived value, customer satisfaction, trust, relationship commitment and tendency to customer stickiness. These findings emphasize the importance of these variables for online stores in order to influence attraction and retainment of customers. In this research only a sample of online stores customers in Tehran were evaluated; therefore generalization to other tissues and companies are limited. The findings are based on self-report data. It is suggested that future studies use qualitative and mixed research methods for a deeper understanding of the factors affecting customer stickiness tendency.

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