

## E-customer loyalty in gamified trusted store platforms: a case study analysis in Iran

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### ABSTRACT

Customer satisfaction, trust, and loyalty are the three most fundamental elements of e-marketing. Previous researchers have noted that satisfaction is a key factor in commanding loyalty. However, the relationship between satisfaction, trust, and loyalty is strongly dependent on the type of platform provided by digital stores. On the other hand, gamification in E-businesses has grown rapidly in recent years. In this context, it is necessary to explore the effects of gamification on e-customer satisfaction and loyalty. In this paper, it is argued that customer satisfaction alone cannot inspire loyalty. Simply speaking, customers' satisfaction with gamified services can lead to developing trust and, in turn, loyalty. This research also presents a thorough review of the effect of store-related motivational factors, such as gamification, on trust. These factors include moderator and mediator variables. The hypotheses of this study are considered in the context of one of the largest online retail stores in Iran which enjoys a large market share in the Middle East. To this end, Lawshe content validity ratio is utilized and expert opinions are applied to the proposed model. Evaluation results, obtained through the smartPLS, established the robustness of our modeling in terms of reliability analysis, significance level analysis, discriminant validity analysis, coefficient of determination, model fitting, and cross-validation.

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## 1. INTRODUCTION

The internet has prompted the expansion of online shopping activities, and this has created many opportunities for the business sector to establish and maintain customer relationships and interactions [1], [2]. A customer's satisfaction with online shopping is the outcome of fulfilling his/her expectation of the vendor's performance or service/product delivery. If customers are satisfied with their perceived product/service and trust the store, they will usually return to purchase again [3], which is what is meant by loyalty. Loyalty is the most crucial factor in E-commerce [4]. It can be argued that customer satisfaction and trust together encourage loyalty [5].

In short, customer satisfaction, trust, and loyalty constitute the three angles of e-business and E-marketing. A large and growing body of literature has investigated the factors affecting E-customer satisfaction and loyalty. The most significant variables bearing upon customer satisfaction that have been proposed in previous research include website design, price, content quality, security, trust, product support, payment, and timely delivery [6]-[8]. While satisfaction is the chief factor in developing loyalty, the relationship between satisfaction, trust, and loyalty is almost dependent on the type of platform provided by

digital stores. On the other hand, the gamification of e-commerce processes has soared in recent years. Gamification aims at motivating the e-customer to go through the tedious processes of purchasing goods and products to increase the vendor's profit [9], [10]. Hence, it is imperative to examine the effects of gamification on e-customer satisfaction and loyalty. While there are many reports on the use of gamification in digital shopping [9]-[16], the impact of gamification on E-customers' trust has not been adequately studied so far.

This paper suggests that customer satisfaction alone cannot ensure loyalty. More precisely, customers' satisfaction with gamified services can inspire trust and, consequently, loyalty to service. Although some authors have stressed the significance of trust [5], [8], the synergistic impact of satisfaction and trust (a mediating factor) is largely unknown. Another shortcoming of previous researches concerns the improper or inadequate usage of analytical tests. In this regard, significant tests such as reliability analysis, significance level analysis, discriminant validity analysis, coefficient of determination, model fitting, and cross-validation must be run. To the best of our knowledge, none of the previous studies have run all these tests together, or at least no such report has been provided in those works.

This research explores the factors which affect the satisfaction and loyalty of customers in online purchases. To this end, the impact and relationship of website design quality, product price, security, support, customization, delivery, and payment are measured and analyzed. Other related topics such as word of mouth, social media marketing, and advertisement will also be discussed. In summary, the goals of this study are:

- Exploring the factors affecting e-customer satisfaction in Iran's economic system.
- Discovering motivational factors, such as gamification, on customer satisfaction and trust.
- Determining the distinct impact of customer satisfaction on trust and loyalty.
- Addressing the effect of customer satisfaction on loyalty with and without considering the mediating variable of trust.
- Diagnosing and eliminating negative and limiting factors on loyalty.
- Investigating moderator variables affecting E-customer loyalty.

In this research, the hypotheses were studied in the context of one of the leading online retailers in Iran. The present research is the first attempt to identify major factors affecting E-customer loyalty in the context of trusted gamified platforms. The remainder of this paper is organized as follows: section 2 reviews the most important studies on e-customer loyalty; section 3 describes the proposed methodology; section 4 evaluates the results of hypotheses achieved based on statistical package for the social sciences (SPSS) [17] and smartPLS [18] tools; finally, section 5 concludes the study and provides suggestions for future research.

## 2. BACKGROUND AND LITERATURE REVIEW

So far, various models have been proposed by researchers to gain customer satisfaction and consequently the customer loyalty. Here we have a look at major models that have been adopted by the community. The IDIC framework [19] is suggested for using the web effectively to form the producer-consumer relationship. IDIC stands for "customer identification", "customer differentiation", "customer interaction", and "customer communications". Digital retailers need to identify and target their ideal customers and then move them up the "Ladder of Loyalty" [19] and even a proportion of them up the "Ladder of Engagement" [20], so that they become loyal lifetime customers.

According to the quality safety assurance (QSA) model, customer satisfaction can be achieved through reliability, rapid response to customer requests, price, quality, facilities, and service guarantees. The aforementioned components in the QSA model affect different dimensions of service quality in online shopping and customer satisfaction [21]. Other researches concerning the QSA for E-customers can be found in [2], [3], [22]-[24].

Alam and Yasin [5] found that website design, reliability, product variety, and deliverability are key variables that affect online shopping. Their results show that time-saving does not have a significant impact on customer satisfaction. Guo *et al.* [25] found that all eight items shown in Figure 1 are directly related to satisfaction with online shopping.

The main purpose of the customer satisfaction index (CSI) model is to estimate the impact of customer satisfaction index on customer loyalty. Many countries, such as the US and European countries have compiled the index. For example, three key variables affecting customer satisfaction in the US CSI are "customer perceived quality", "perceived value", and "customer expectations" [26]. Figure 2 shows the major components of the CSI model. Another important research on perceived value has been presented by Gumussoy *et al.* [3].

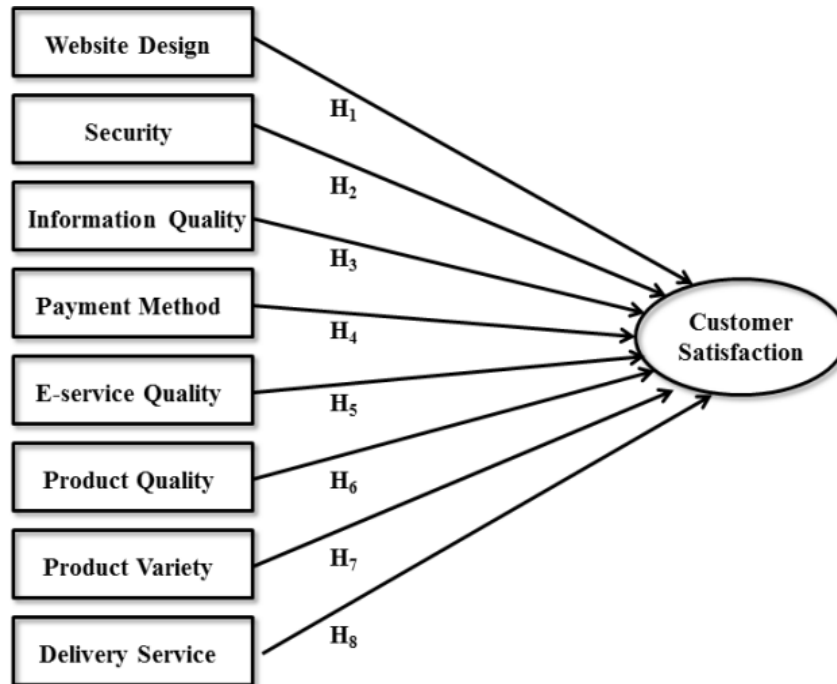


Figure 1. The model presented by Guo *et al.* [25]

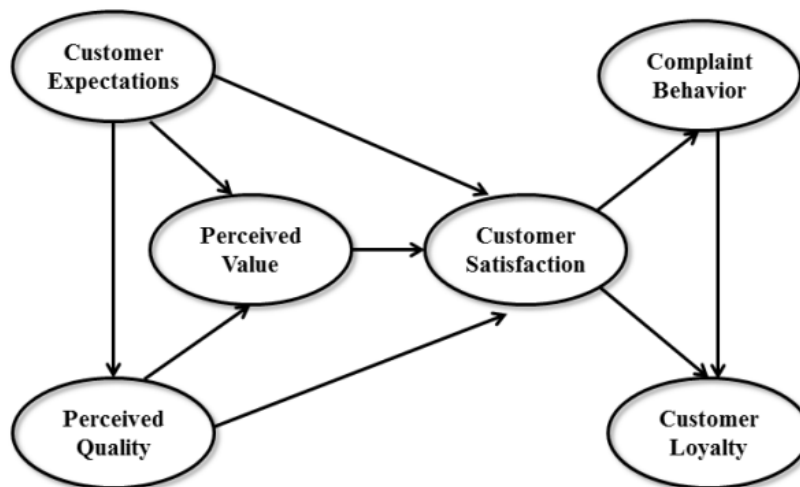


Figure 2. US customer satisfaction index [26]

Based on previous researches, it is clear that most researchers have identified factors such as website design, website security, information quality, payment method, quality of electronic services, product quality, product variety, delivery services as key variables that affect online shopping. In the previous researches, the relationship between satisfaction, trust, and privacy have been largely ignored. However, because the majority of e-commerce researches has been done before the emergence of gamification, the impact of the gamification on customer purchase satisfaction has been ignored. In recent researches, the effect of gamification has been seen as a key factor in E-customer loyalty [9]-[16]. For example, Yang *et al.* [9] found that perceived usefulness influences intention to engage with the game and the attitude towards the gamified brand, and hence is the strongest predictor to brand attitude. A similar study by Nannan and Hamari [16] was conducted regarding gamification and brand engagement. In another research by Hwang and Choi [15], the authors realized that gamification increases consumer loyalty, which in turn results in increased consumer participation. Accordingly, in this study, the gamification element is seen as one of the hidden variables (constructs).

### 3. RESEARCH METHODOLOGY

#### 3.1. Proposed model

Based on models reviewed so far, it seems that influencing factors in online shopping will initially affect the "customer satisfaction" and, if satisfied, will give the customer a sense of confidence. This sense of trust and satisfaction makes the customer loyal to the store. Simply speaking, it seems that *trust* is more effective than *satisfaction* in *loyalty*. Meanwhile, "*customer satisfaction*" has the most impact on trust. In other words, *satisfaction* indirectly influences *trust* through *loyalty*. Accordingly, we propose the model shown in Figure 3.

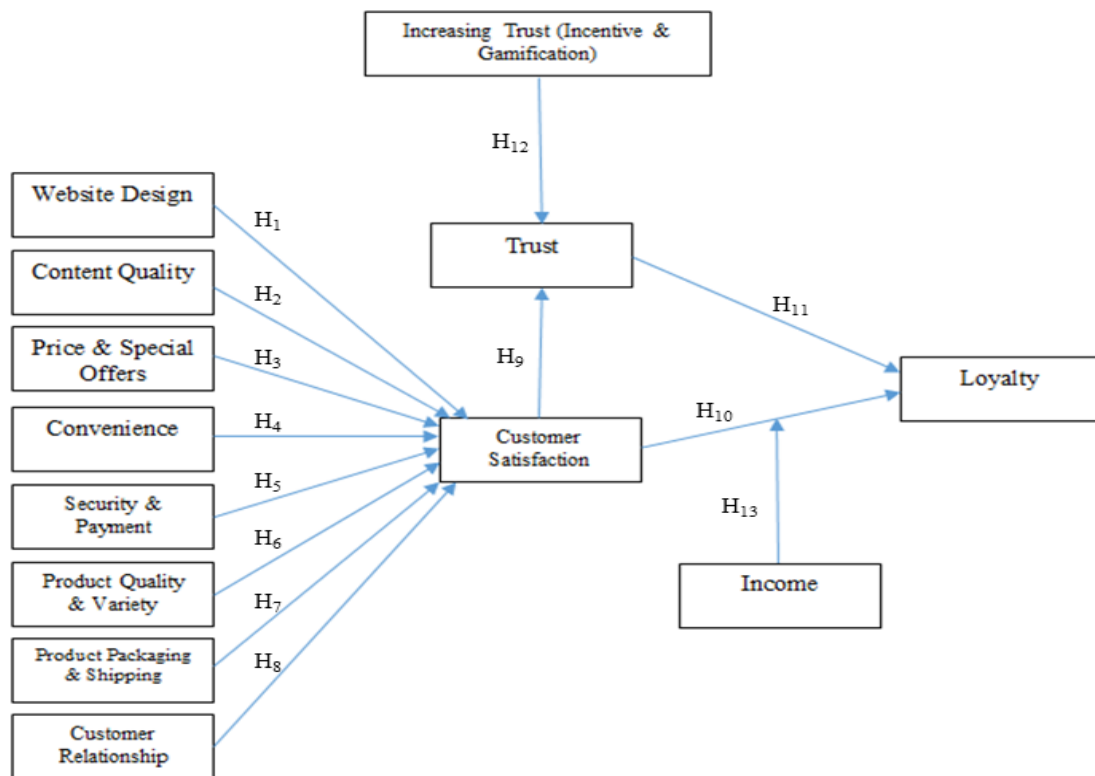


Figure 3. The proposed research model

According to the proposed model, in the first step, we will examine the impact of the aforementioned items on "*customer satisfaction*". In the second step, the impact of "*customer satisfaction*" on "*customer trust*" will be examined. Finally, in the third step, the influence of *trust* (as a mediator variable) and *satisfaction* on the *loyalty* factor will be evaluated simultaneously. We believe that "*familiarity with the store's motivational offers*" also plays a role. Also, "*customer income value*" as a moderator variable has an important role in the number of customer referrals to the store and has an impact on *loyalty*.

#### 3.2. Definition of variables

The most important variables used in this study are explained in this section. For each variable, the most relevant research work is mentioned.

- Website design: one of the factors affecting customer satisfaction in online shopping is website design. A website should be simple and easy-to-use for all kinds of customers [27]. Navigation of a website also plays an important role in customer satisfaction [26]. There should not be too many nested references to different pages. Unnecessary redirections from one page to another confuse the customer [22]. Another subtle factor that must be considered when designing a website is the page loading speed [28].
- Content quality: the most important factor for a website to function properly is content quality [19].
- Price: The customer is always looking for a lower price and better quality [29].
- Security and privacy: this means the ability of the website to protect the consumer's personal information from any illegal disclosure during E-transactions [6]. Major factors that contribute to enhancing the security of a website are authentication, authorization, cryptography, and security certificates. The

- website should not disclose the customer's private information to third parties without its consent (privacy) [28].
- Security and payment: if the service is not delivered on time, it will result in customer churn. In online payment, the customer expects the website to have all the security issues anticipated [8]. Also, there are a variety of payment methods such as offline, and cash.
  - Service differentiation: according to the IDIC model, the diversity of products and services helps to meet different customer tastes [19], [30].
  - Packaging and delivery: proper packaging results in customer satisfaction. Also, the product must be delivered timely [28].
  - Customer relationship and support: a significant portion of the customer relationship starts after the purchase process is completed. This feature is an important requirement for customer satisfaction and profit optimization [4], [30].
  - Trust: trust includes consistency, availability, fairness, transparency, honesty, authenticity, and brand reputation [8]. Naturally, to gain customers' trust in online shopping, all effective factors must be considered. These include shipping method, payment model, website design, support, website security, information quality, payment method, electronic service quality, product quality, product variety, and delivery services. Once the customer trusts the online store, all of the above factors are satisfied. Trust includes cohesion, availability, fairness, transparency, honesty, and accuracy.
  - Incentive and gamification: this means using techniques to attract a customer to engage with a website or product. This stimulation should ultimately lead to "*customer conversion*", and customer purchase [19]. One of the ways to make the purchasing process more attractive is gamification. The simplest definition of gamification is the art of incorporating game mechanisms into tasks and processes in such a way that leads to an enhancement in customer motivation and efficiency. For example, a website can offer mind games or other types of casual online games [31] to its customers and give the winners a discount on their shopping [19]. In recent years, numerous studies have been conducted on the use of gamification in e-marketing [10], [12], [15] but so far no research has been conducted on the use of gamification in e-retailing and trust! If a new visitor is encouraged by previous customers to buy from our site, he/she will be trusted directly. The most important reasons for choosing a store include word of mouth (WoM), search engines, purchase experience, and affiliate marketing. As is evident in the proposed model, these factors have a direct impact on customer confidence.

### 3.3. Hypotheses of research

According to the model proposed in Figure 3, we present the following hypotheses:

- H<sub>1</sub>: "*Website Design*" has a positive impact and has a significant relationship with "*Customer Satisfaction*".
- H<sub>2</sub>: "*Content Quality*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>3</sub>: "*Price & Special Offers*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>4</sub>: "*Convenience*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>5</sub>: "*Security & Payment*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>6</sub>: "*Product Quality & Variety*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>7</sub>: "*Product Packaging & Shipping*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>8</sub>: "*Customer Relationship*" has a positive effect and has a significant relationship with "*Customer Satisfaction*".
- H<sub>9</sub>: "*Customer Satisfaction*" has a positive effect and has a significant relationship with "*Trust*".
- H<sub>10</sub>: "*Customer Satisfaction*" has a positive effect and has a significant relationship with "*Loyalty*".
- H<sub>11</sub>: "*Trust*" has a positive effect and has a significant relationship with "*Loyalty*".
- H<sub>12</sub>: "*Increasing Trust (Incentive & Gamification)*" factor has a positive effect and has a significant relationship with "*Trust*".
- H<sub>13</sub>: "*Income*" has a positive effect and has a significant relationship with "*Loyalty*".

In the next section, based on the data collected, we will examine the validity of each of these assumptions. Participants in this survey are people who in the past year have had the experience of online shopping from an online store in Iran. These include all groups in society, including doctors, engineers, university professors, staff, ordinary people, and so on. This survey was conducted by simple random sampling. The products of these stores include all food and non-food items that are offered in the e-store. The data analysis was conducted based on 200 questionnaires. The respondents electronically filled out a 36-item questionnaire. The components of this questionnaire along with their abbreviations are shown in Table 1.

Table 1. The components of the proposed model and their abbreviations

Abbreviation	Construct	Abbreviation	Construct
QV	Quality & Variety	WD	Website Design
PS	Product Packaging & Shipping	CQ	Content Quality
CR	Customer Relationship	PO	Price & Special Offers
CS	Customer Satisfaction	CO	Convenience
TR	Trust	SP	Security & Payment
Increasing	Increasing Trust (Incentive & Gamification)	LO	Loyalty
		Income	Income

Before providing the questionnaire to the respondents, we evaluated its validity through experts. The validity of the questionnaire helps us to examine to what extent the data measures the real characteristic of the target. There are several ways to measure validity, the most common being lawshe content validity ratio (CVR) [32]. For this purpose, several experts are selected on the subject. Then, they are asked to answer the questions in three scales: "question is necessary", "question is useful but not necessary", and "question should be deleted". Then, the validity ratio for each question is calculated is being as:

$$CVR = \frac{n_e - N/2}{N/2} \quad (1)$$

In (1),  $N$  is the total number of experts and  $n_e$  is the number of experts who have chosen the option "question is necessary". Given the number of experts surveyed, the minimum acceptable ratio is determined by a table called the CVR, which is not shown here due to a lack of space. Questions that have a calculated value less than the desired value in the table should be deleted. We selected 20 experts ( $N = 20$ ) from the startup managers and professors of Iranian universities. The CVR threshold value for 20 experts is 0.42 [32]. For example, if for a question, 19 experts select the "question is necessary" option, then according to (1) we will have  $CVR = (19 - 10) / 10 = 0.9$ . Since  $0.9 > 0.42$  so that question will not be deleted!

After running the Lawshe CVR test, six questions were deleted! These are two questions from the "Website Design" construct, two questions from the "Convenience" construct, one question from the "Product Packaging & Shipping" construct, and one question from the "Trust" construct. Since six questions were omitted by experts, the number of questions decreased from 42 to 36.

## 4. ANALYSIS AND RESULTS

### 4.1. Reliability analysis

The smartPLS software [18] uses a variance-based partial least square (PLS) method to analyze data. The kaiser-meyer-olkin index (KMO) is a criterion for proving that the sample size obtained in surveys is sufficient [33]. On the other hand, this index examines the intensity of the correlation between the questions of the questionnaire. The closer the KMO index is to 1, the better the sample selection (explicit variables). The threshold limit in this index is 0.6. That is, if the value of the index is higher than 0.6, the sample is suitable.

Another test that is used before factor analysis is the Bartlett test. If  $\text{sig} < \alpha$  (significance level) then the implementation of factor analysis is approved and otherwise there is no reason for factor analysis. The alpha in this study is the error rate, which is normally considered to be 0.05. Table 2 shows the KMO and Bartlett index values for the questionnaire questions.

Table 2. KMO and Bartlett's test

Statistical Test	Obtained Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.922
Approx. Chi-Square	1368.037
Bartlett's Test of Sphericity	df
	Sig.
	.000

We used Cronbach's alpha for reliability analysis. Reliability means that if an instrument/scale is used in a population at several different times, the results will not differ considerably. As can be seen in Table 3, Cronbach's alpha values are all above 0.7 and within the permissible range. Meanwhile, composite reliability calculates reliability more accurately and is more valid than Cronbach's alpha. The last column of Table 3 indicates the values of divergent validity (average variance extracted (AVE)), which determines the internal consistency of constructs. As can be seen, all of these values exceed 0.5 and are acceptable.

Table 3. Cronbach's alpha for different components of the questionnaire

Construct Reliability and Validity	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Website Design	0.722	0.841	0.640
Content Quality	0.901	0.938	0.834
Price & Special Offers	0.916	0.947	0.857
Convenience	0.935	0.954	0.838
Security & Payment	0.880	0.925	0.804
Quality & Variety	0.848	0.908	0.767
Packaging & Shipping	0.895	0.931	0.819
Customer Relationship	0.814	0.890	0.730
Customer Satisfaction	0.893	0.934	0.824
Trust	0.905	0.941	0.841
Loyalty	0.877	0.924	0.802

**4.2. Discriminant validity analysis**

Discriminant validity indicates how much the questions of one factor are different from those of other factors. We used the Fornell-Larcker criterion [34] for this purpose. Discriminant validity (or divergent validity) is acceptable when the AVE value of each construct is greater than its common variance with other constructs (i.e., the square of the correlation coefficients between constructs) in the model. As shown in Table 4, the proposed model has divergent validity because the square root of each AVE value is higher than its corresponding row and column values.

Table 4. The Fornell-Larcker matrix

Discriminant Validity	Content Quality	Convenience	Customer Relationship	Customer Satisfaction	Loyalty	Packaging & Shipping	Price & Offers	Quality & Variety	Security & Payment	Trust	Website Design
Content quality	0.913										
Convenience	0.486	0.915									
Customer Relationship	0.281	0.633	0.855								
Customer Satisfaction	0.413	0.735	0.696	0.908							
Loyalty	0.435	0.771	0.625	0.754	0.895						
Packaging & Shipping	0.171	0.117	0.051	0.120	0.057	0.905					
Price & Offers	0.819	0.331	0.202	0.301	0.315	0.159	0.925				
Quality & Variety	0.501	0.438	0.282	0.381	0.458	0.039	0.297	0.876			
Security & Payment	0.832	0.389	0.236	0.262	0.313	0.121	0.682	0.468	0.896		
Trust	0.452	0.828	0.649	0.846	0.816	0.131	0.345	0.357	0.263	0.917	
Website Design	0.044	0.056	0.032	0.065	0.070	0.074	0.075	0.001	0.023	0.087	0.800

**4.3. Coefficient of determination**

The coefficient of determination ( $R^2$ ) states the extent to which the dependent variable changes can be predicted through other variables. The values of  $R^2$  and adjusted  $R^2$  criteria are given in Table 5. The overall effect of variables on "Loyalty" is 68.7%; however, it decreases to 68% after false effects are reduced. Thus, 68% of changes in the "Loyalty" variable could be identified and interpreted through other variables.

Table 5.  $R^2$  and adjusted  $R^2$  values

	R-squared	Adjusted R-squared
Customer Satisfaction	0.658	0.644
Trust	0.719	0.716
Loyalty	0.687	0.680

**4.4. Mediator variables**

In structural analysis, the combined effect of two variables may be indirectly greater than their direct individual effect. Table 6 presents the effect of mediator variables. Accordingly, it can be observed that the "security & payment" component directly influences "customer satisfaction" and has an indirect bearing on

"loyalty". Furthermore, "customer satisfaction" directly affects "loyalty," but the indirect effect of this variable on "loyalty" is greater than its direct effect. As mediator variables, "customer satisfaction" and "trust" affect "loyalty," which is a dependent variable. "Income" is another mediator variable, which affects this dependent variable.

Table 7 provides the results of hypothesis testing. As shown, all the hypotheses are accepted except H<sub>1</sub>, H<sub>3</sub>, H<sub>6</sub>, and H<sub>7</sub>. The constructs of "content quality", "convenience", "security & payment", and "customer relationship" affect "customer satisfaction"; "customer satisfaction" has a positive effect on "trust"; ultimately, "customer satisfaction" and "trust" together give rise to "loyalty". Also, "income" and "increasing trust (incentive & gamification)" have a positive and significant effect on the variables of "trust" and "loyalty".

Table 6. Indirect effects of variables

Specific Indirect Effects	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-statistic ( O/STDEV )	P-value
Customer Relationship -> Customer satisfaction -> Loyalty	0.089	0.092	0.037	2.398	0.017
Content quality -> Customer satisfaction -> Trust -> Loyalty	0.130	0.121	0.065	1.999	0.046
Convenience -> Customer satisfaction -> Trust -> Loyalty	0.219	0.216	0.064	3.430	0.001
Customer Relationship -> Customer satisfaction -> Trust -> Loyalty	0.205	0.205	0.059	3.498	0.000
Security & Payment -> Customer satisfaction -> Trust -> Loyalty	0.134	0.118	0.067	1.999	0.046
Customer satisfaction -> Trust -> Loyalty	0.522	0.514	0.077	6.745	0.000
Increasing trust -> Trust -> Loyalty	0.038	0.041	0.015	2.549	0.011
Content quality -> Customer satisfaction -> Trust	0.211	0.199	0.101	2.091	0.037
Convenience -> Customer satisfaction -> Trust	0.357	0.361	0.100	3.553	0.000
Customer Relationship -> Customer satisfaction -> Trust	0.334	0.337	0.069	4.868	0.000
Security & Payment -> Customer satisfaction -> Trust	0.219	0.196	0.108	2.028	0.043

Table 7. The results of hypothesis testing

Hypothesis number	Result	Original Sample (O)	P-value	Hypothesis description
H <sub>1</sub>	Rejected	0.025	0.635	"Website Design" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>2</sub>	Accepted	0.249	0.040	"Content Quality" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>3</sub>	Rejected	0.025	0.731	"Price & Special Offers" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>4</sub>	Accepted	0.420	0.000	"Convenience" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>5</sub>	Accepted	0.258	0.044	"Security & Payment" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>6</sub>	Rejected	0.074	0.311	"Product Quality & Variety" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>7</sub>	Rejected	0.035	0.389	"Product Packaging & Shipping" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>8</sub>	Accepted	0.393	0.000	"Customer Relationship" has a positive impact on and a significant relationship with "Customer Satisfaction"
H <sub>9</sub>	Accepted	0.850	0.000	"Customer Satisfaction" has a positive impact on and a significant relationship with "Trust"
H <sub>10</sub>	Accepted	0.750	0.000	"Customer Satisfaction" has a positive impact on and a significant relationship with "Loyalty"
H <sub>11</sub>	Accepted	0.614	0.000	"Trust" has a positive impact on and a significant relationship with "Loyalty"
H <sub>12</sub>	Accepted	0.062	0.008	"Increasing Trust (Incentive & Gamification)" has a positive impact on and a significant relationship with "Trust"
H <sub>13</sub>	Accepted	0.081	0.034	"Income" has a positive impact on and a significant relationship with "Loyalty"

#### 4.5. Model fitting and cross-validation

The goodness of fit test shows how much the researcher's proposed model is based on actual data. It illustrates how consistent a theoretical model is with an experimental model. Several indicators examine the standardized root mean square residual (SRMR) and normed fit index (NFI) values in smartPLS. The value of the SRMR index should not exceed 0.08; as for NFI, the closer the output to 1 is, the higher the model fitting will be [35]. Table 8 shows the model fitting and cross-validation.



**Table 8. Model fitting values**

Fit Summary	Saturated Model	Estimated Model
SRMR	0.053	0.067
NFI	0.773	0.757

Figure 4 depicts the estimated structural model derived from smartPLS. The values of T-statistic are specified on each edge. As mentioned earlier, "content quality", "convenience", "security&payment", and "customer relationship" exert a direct and significant effect on "customer satisfaction". Also, "customer satisfaction" affects the dependent variable of "loyalty" both directly and indirectly through the mediator variable of "trust". Moreover, "income", as a moderator variable, influences "loyalty". Finally, "increasing trust (incentive&gamification)" directly affects "trust". All the data of this research along with the details of the respondents' answers can be downloaded at [36].

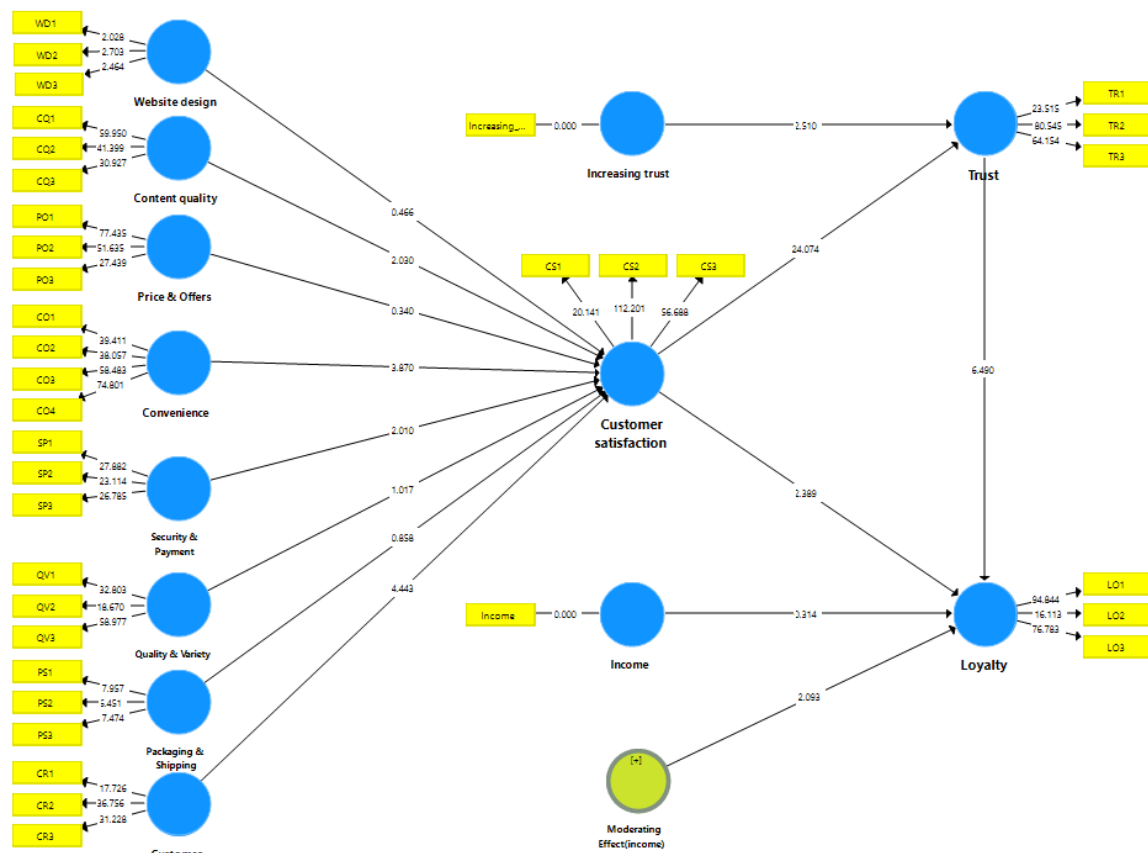


Figure 4. The estimated structural model

### 5. CONCLUDING REMARKS AND IMPLICATIONS

The results of this study demonstrated that "customer satisfaction" is predicated on the constructs of "content quality", "convenience", "security&payment", and "customer relationship". Also, "customer satisfaction" has a positive impact on "trust"; eventually, "customer satisfaction" and "trust" together can entail "loyalty". More precisely, cultivating loyalty in the customer through "trust" is much more effective than without this mediating factor. Another finding of the study was that "income" and "increasing trust (incentive&gamification)" had a significant positive effect on "trust" and "loyalty".

This research had two limitations. The first one concerns the "Customer satisfaction" factor. Based on the results of the present study, it appears that if this variable included more questions, stronger effects might have been observed. Another limitation is that we focused on just one particular economic system, namely Iran. As one of the most important countries in the Middle East, Iran is always attracted by foreign investors due to its political and cultural conditions as well as rich energy and natural resources. The purpose of this study was to investigate the trend of digital retail businesses in this country so that policymakers could envision better plans concerning customers in this society.

The recommendations of this study are twofold. First, to improve the “*website design*” component, apart from the suggestions made by other researchers, it is rewarding to integrate gamification into service provision processes. In this regard, using an online video game on the homepage of the website and gamifying tedious shopping can act as powerful incentives to attract customers. Second, it is necessary to conduct new studies on moderating factors that are rooted in cultural variables.

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