

Enhancing Customer Lifetime Value through Offline and Online Service Quality Mediated by Customer Satisfaction and Loyalty in Platform-Based Businesses (Snapp)

Mohammadreza Mashayekh ¹, Seyyedeh Masoumeh Ghamkhari ^{2,*} and Naser Shambayati ³



¹ Assistant Professor, Department of Business Administration, Payame Noor University, Tehran, Iran; 

² Assistant Professor, Department of Business Administration, Payame Noor University, Tehran, Iran; 

³ Assistant Professor, Department of Business Administration, Payame Noor University, Tehran, Iran; 

* Correspondence: ghamkhari@pnu.ac.ir

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Abstract: In contemporary Iranian society, the emergence of platform-based businesses that facilitate connections between producers and service providers with customers and end-users has significantly expanded. Among these businesses, the Snapp application serves as a platform linking private car drivers with urban passengers. The quality of online and offline services provided by such businesses has a considerable impact on their profitability and on fostering customer satisfaction, which ultimately increases the customer lifetime value for the company. The present study aims to examine the effect of service quality dimensions on customer lifetime value dimensions in platform-based businesses (Snapp), with the mediating role of customer satisfaction and loyalty. From a methodological standpoint, this study is applied in purpose and descriptive/correlational in data collection. The statistical population consisted of Snapp service users. After conducting a literature review, a simple random sampling technique was employed, and data were collected using a questionnaire. The sample size was determined as 418 participants. Reliability was assessed using Cronbach's alpha, whereby the questionnaire was distributed among 80 participants in the statistical sample. Using SPSS software, Cronbach's alpha was obtained at a level above 0.70. To assess validity, content validity was adopted, and the opinions of experts and specialists were utilized. For data analysis, structural equation modeling (SEM) and the Sobel test were applied to investigate the effects of mediating variables, with the aid of SPSS and LISREL software. The findings indicated that the dimensions of online service quality, at the same level and even slightly higher than offline service quality, exert a positive effect on customer lifetime value dimensions through the mediating roles of customer satisfaction and loyalty. Furthermore, customer sense of control and trustworthiness were not found to significantly affect customer satisfaction, while the reverse hypothesis concerning customer loyalty and word-of-mouth advertising was confirmed.

Keywords: Platform-based business, Customer lifetime value, Service quality, Customer satisfaction, Customer loyalty.

1. Introduction

In the contemporary digital economy, platform-based business models have become a defining feature of organizational competitiveness and customer value creation. Platforms enable the interaction between producers, service providers, and consumers by facilitating transactions, data exchange, and network effects. In this context, digital service quality, customer satisfaction, and loyalty are increasingly viewed as the primary drivers of long-

term customer value. The case of platform businesses in emerging markets, such as Snapp in Iran, illustrates the complexity of simultaneously managing offline and online service quality dimensions while fostering satisfaction and loyalty as mediators of customer lifetime value. Understanding how these dynamics unfold requires integrating theoretical insights from service quality research, digital business strategies, and customer relationship management [1, 2].

The literature on platform business models highlights the role of network effects in sustaining growth and competitiveness. When a platform succeeds in creating value for both sides of the market—service providers and consumers—its long-term viability is reinforced. Hosseinzadeh Shahri et al. (2022) argue that loyalty in platforms has significant consequences because of the amplification effect of network externalities [3]. Similarly, Shaughnessy (2016) emphasizes that platform-based models enable disruptive innovation by mobilizing ecosystems of participants who co-create value beyond the traditional boundaries of the firm [4]. From a strategic management perspective, digital platforms thus require more than technological capability; they demand sustained customer engagement and satisfaction.

Customer satisfaction and loyalty have been central constructs in marketing and management research. Ahmadi and Abadi (2015) demonstrated in their empirical study of travel agencies in Tehran that service quality dimensions directly shape satisfaction, trust, and loyalty, which in turn reinforce long-term business performance [5]. These findings are consistent with global research that positions satisfaction as a mediator between service attributes and loyalty outcomes. In the context of Chinese mobile data services, Jia-Yin et al. (2014) confirmed that user characteristics and service quality significantly determine customer lifetime value, highlighting the importance of tailoring services to customer profiles [6]. Likewise, Khaleh and Ganji (2018) showed that measuring satisfaction with urban service quality requires context-sensitive models such as the Kano model, demonstrating that customer satisfaction operates in multidimensional ways across industries [7].

The digital transformation of service industries has further complicated these relationships by introducing new variables, such as perceived digital quality, system reliability, and responsiveness of online interfaces. Kim and Yang (2025), in a study of the banking industry, showed that digital quality strongly influences customer satisfaction and brand loyalty, especially under conditions of environmental uncertainty [8]. Minhaj and Khan (2025) added to this perspective by modeling e-banking service dimensions through structural equation modeling, finding that satisfaction mediates the link between service dimensions and loyalty [9]. Such evidence indicates that in digital and hybrid service environments, satisfaction operates as a bridge between the technical features of platforms and the behavioral outcomes of customers.

The emergence of platform businesses in developing economies also underscores the role of strategic adaptation in addressing contextual challenges. Ebrahimi Shahrabadi et al. (2024) proposed a model for overcoming barriers to launching digital platforms, identifying critical success factors and strategies necessary to establish resilience [1]. Rafieian Isfahani (2022) also emphasized that digital platforms require unique business strategies that differ fundamentally from traditional linear models, especially in markets with infrastructural and institutional constraints [2]. From a comparative standpoint, David-West et al. (2016) documented how business incubation and startup models in Sub-Saharan Africa have supported platform growth, revealing the role of institutional support in fostering sustainable platform ecosystems [10]. These studies provide valuable lessons for contexts like Iran, where platforms such as Snapp face regulatory, cultural, and technological complexities.

In addition to strategic challenges, methodological advancements have enriched our understanding of the service quality–satisfaction–loyalty nexus. Mohsenin and Esfidani (2014) highlighted the power of structural

equation modeling (SEM) in evaluating complex relationships among latent variables in management research [11]. Subramanian et al. (2014) applied SEM in Chinese e-retailing to identify the role of quality factors in driving customer satisfaction and competitiveness [12]. Similarly, Mahdavi and Abed (2014) examined the determinants of customer loyalty in the life insurance industry, reinforcing the role of trust, satisfaction, and service quality in sustaining loyalty in long-term service relationships [13]. Together, these studies demonstrate that methodological rigor is essential for capturing the mediating roles of satisfaction and loyalty in platform contexts.

In financial services, the intersection of text mining and customer sentiment has introduced a new dimension to the study of satisfaction and loyalty. Ghadiridehkordi et al. (2025) leveraged sentiment analysis to improve customer satisfaction in UK banks, showing how digital data can be integrated into service improvement strategies [14]. Tahir et al. (2024) further expanded on the literature by conducting a systematic review of brand image, satisfaction, and loyalty, concluding that brand perceptions remain central to sustaining satisfaction outcomes [15]. These findings underscore the necessity of integrating digital tools and brand strategies to enhance customer value in competitive platform ecosystems.

At the same time, empirical research in different cultural and economic contexts has highlighted how customer satisfaction is shaped by both online and offline service quality. Kursia and Khan (2018) demonstrated that online banking satisfaction in Bangladesh is influenced by responsiveness, reliability, and convenience, reaffirming that traditional service quality dimensions remain relevant even in digital settings [16]. Parsakia and Jafari (2023) examined strategies for enhancing customer engagement through artificial intelligence in online markets, showing that personalization and intelligent interaction significantly affect customer loyalty and long-term engagement [17]. Their work indicates that artificial intelligence can be harnessed to enhance customer lifetime value by reinforcing satisfaction mechanisms.

The integration of offline and online service quality dimensions is particularly critical in hybrid platforms such as ride-hailing services. While digital interfaces provide speed, convenience, and transparency, the offline service experience—such as driver behavior, punctuality, and vehicle quality—remains equally important. This duality makes platforms like Snapp unique laboratories for examining how satisfaction and loyalty mediate the link between service quality and long-term value. The insights from existing research suggest that online service quality may have a slightly stronger influence due to its scalability and standardization, but offline quality remains crucial for trust-building and customer retention [5, 7].

A growing body of scholarship stresses that the sustainability of platform-based business models depends not only on attracting users but also on converting them into loyal, long-term customers. Hosseinzadeh Shahri et al. (2022) pointed out that loyalty generates network effects that strengthen platform competitiveness [3]. Shaughnessy (2016) similarly emphasized that disruptive innovation in platform ecosystems relies on engaging users beyond transactional relationships [4]. In this regard, satisfaction and loyalty are not merely outcomes of service quality but strategic resources that shape the trajectory of platform growth.

Taken together, the reviewed studies provide a coherent basis for investigating the relationship between service quality dimensions (both online and offline), customer satisfaction, and loyalty in the context of Snapp. They show that satisfaction and loyalty serve as mediators in the service quality–customer value relationship, and that methodological approaches such as SEM and sentiment analysis can help capture these complex interdependencies. Furthermore, contextual studies from Iran, Sub-Saharan Africa, and Asia illustrate that platform businesses face unique challenges related to infrastructure, regulation, and cultural expectations, which must be addressed strategically to sustain long-term customer value [1, 2, 10].

Accordingly, this study aims to contribute to the literature by examining how offline and online service quality dimensions in the Snapp platform influence customer lifetime value, with satisfaction and loyalty acting as mediators.

2. Methodology

The present study can be considered applied in terms of its objective, and descriptive/correlational in terms of the method of data collection, since in this research the researcher examines the relationships among the variables of the model. Among the types of research in which correlation or covariance matrices are analyzed are factor analysis and structural equation modeling (SEM).

The statistical population consists of all elements and individuals within a specific geographical scope (global or regional) who possess one or more common characteristics. The statistical population of this research is composed of the customers of the platform-based business Snapp. Determining the exact size of the statistical population is not possible given its breadth; however, selecting an appropriate sampling method can provide a reasonably accurate reflection of the opinions of the entire population.

Since the SEM technique is to a large extent similar to certain aspects of multiple regression, the principles for determining sample size in multiple regression analysis can also be applied to sample size determination in SEM. In multiple regression analysis, the ratio of the number of samples (distributed questionnaires) to independent variables should not be less than 5; otherwise, the results obtained from the regression equation will not be sufficiently generalizable. A more conservative ratio of 10 observations for each independent variable has also been recommended. From the perspective of James Stevens, even considering 15 observations per predictor variable in multiple regression analysis using the standard ordinary least squares method can serve as a good rule of thumb. Therefore, in general, the sample size in SEM methodology can be determined between 5 and 15 observed variables for each measured variable.

The questionnaire used in this study consists of 30 items. Accordingly, based on the above ratio, a total of 450 questionnaires were distributed, of which 418 valid questionnaires were finally returned.

To determine reliability, Cronbach's alpha method was used. Specifically, the questionnaire was distributed among 80 individuals from the sample population and collected, and their responses were applied in SPSS software to calculate Cronbach's alpha. The results, shown in Table 1, were obtained. This procedure was conducted to ensure that the questionnaire, if having sufficient preliminary reliability, would be distributed among the full statistical sample; otherwise, revisions to the questionnaire would be necessary.

Table 1. Cronbach's Alpha Values for the Research Variables

Row	Variable Name	Cronbach's Alpha	Sample Size
1	Loyalty	0.788	80
2	Satisfaction	0.753	80
3	Customer Lifetime Value	0.811	80
4	Offline Service Quality	0.715	80
5	Online Service Quality	0.807	80
6	All Variables (Combined)	0.887	80

If Cronbach's alpha is greater than 0.70, the questionnaire is considered reliable. Based on the above table, since the Cronbach's alpha value for each variable is greater than 0.70, all variables independently have acceptable

reliability. In addition, Cronbach's alpha for the total variables was above 0.80, confirming the reliability of the pilot sample.

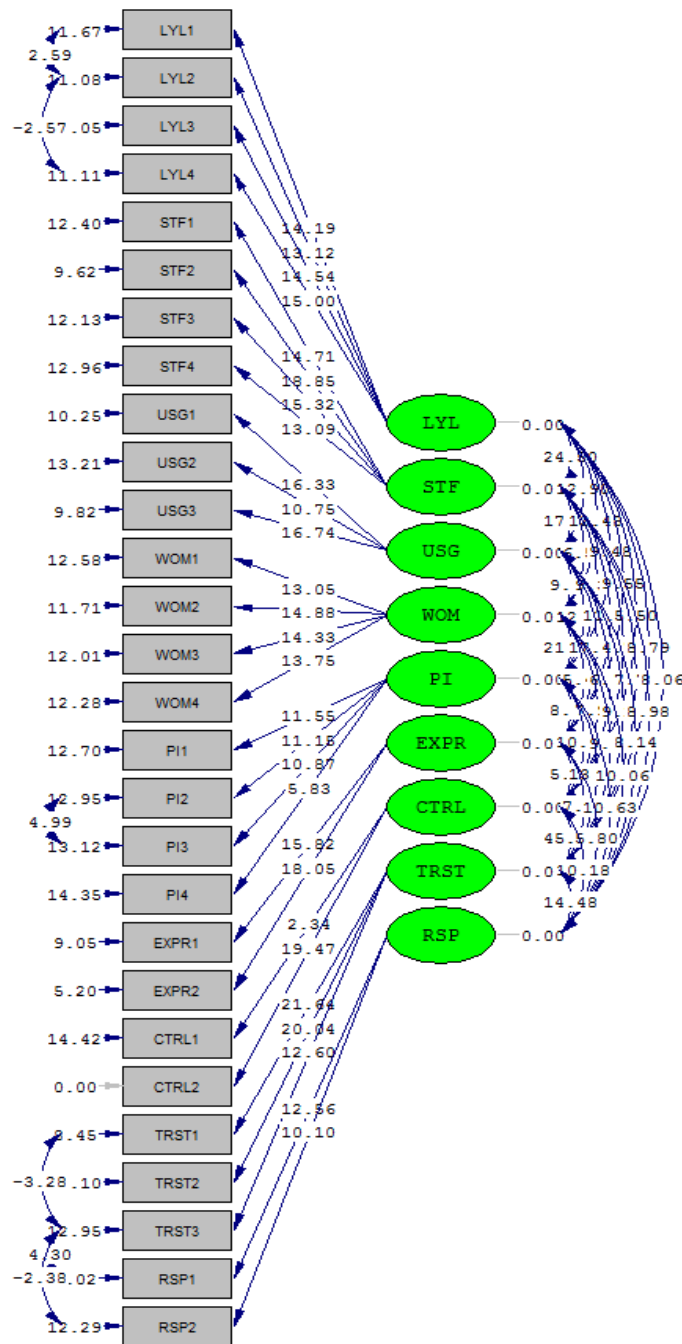
3. Findings and Results

The most important purpose of confirmatory factor analysis (CFA) is to determine the extent to which a pre-defined factor model fits a set of observed data. In other words, this method seeks to assess whether the number of factors measured corresponds with what was expected based on theory and the conceptual model. Essentially, CFA tests the degree of conformity between the theoretical construct and the empirical construct of the research. CFA is applicable when the researcher intends to test hypotheses regarding the number of underlying factors in a set of variables, the relationships of factors with variables, and the fit of the measurement model with theoretical and empirical foundations.

In CFA, the researcher identifies a number of factors based on a pre-determined strategic model, specifying which factors are correlated and which observed variables serve as indicators for which factors. In structural equation modeling (SEM), CFA pursues two major goals: first, to estimate model parameters such as factor loadings, the variance and covariance matrix of factors, and the residual error variance of observed variables; and second, to evaluate the fit of the theoretical model based on the factors considered. Factor loadings between 0.30 and 0.60 indicate moderate effects, while loadings above that level indicate strong effects. If the measurement models are reported with significance values, the t-values show whether a significant relationship exists between factors. Values greater than 1.96 or less than -1.96 for t-values at the 5% significance level indicate the presence of significant relationships among the components.

One method for model modification in CFA is the removal of factor loadings with t-values less than the absolute value of 1.96, loadings below 0.40 or 0.50, or coefficients of determination (R^2) below 0.25 in the model's overall output. Other methods of model modification include: (a) merging factors due to high correlation coefficients; (b) fixing certain parameters; and (c) using LISREL's modification indices. Among all methods, the most scientifically valid approach is the elimination of rejected parameters, which is generally preferred unless the other approaches are supported by theoretical or empirical literature (Mohsennian & Esfidani, 2014). LISREL's modification indices can be applied to indicators of a variable, and LISREL may also suggest correlating indicators with one another. Since such modifications are consistent with theoretical and empirical backgrounds, they are permitted and improve model fit.

Figure 1 illustrates the revised measurement model based on the aforementioned modification methods, in the state of significance values. The goodness-of-fit indices show a considerable improvement compared to the initial model. The revised models enjoy acceptable fit because most indices exceed standard thresholds, and three of the four indices—RMSEA, chi-square/df ratio, GFI, and AGFI—are satisfied, confirming acceptable model fit.



Chi-Square=729.10, df=309, P-value=0.00000, RMSEA=0.057

Figure 1. Revised CFA model in the state of significance values

As observed, to test the research hypotheses the coefficient of determination (R^2) is used, which represents the proportion of variance in the dependent variable that can be explained by regression. Values above 0.75 for endogenous latent variables indicate strong explanatory power, values above 0.50 indicate moderate power, and values above 0.25 indicate weak power. In addition, the t-value is used: values greater than 1.65 indicate significance at the 10% level, values greater than 1.96 indicate significance at the 5% level, and values greater than 2.58 indicate significance at the 1% level. The standardized path coefficients also show the strength of the relationship between dependent and independent variables.

To examine relationship strength, factor loadings (standardized path coefficients) are used. Loadings below 0.30 indicate weak relationships, loadings between 0.30 and 0.60 are acceptable, and loadings above 0.60 are considered highly desirable. The t-value indicates the statistical significance of correlations and relationships, while R^2 indicates the extent to which the dependent variable can be predicted by the independent variable. The following table presents a summary of the results for the main research variables, which will be used to evaluate the hypotheses.

Table 2. Path Coefficients of Direct Effects of Research Model Variables

Row	Relationship Description	Path Coefficient	t-value	R^2	Interpretation
1	Purchase experience → Customer satisfaction	0.47	6.73	0.22	Accepted
2	Customer control → Customer satisfaction	0.12	0.37	0.014	Rejected
3	Customer trust → Customer satisfaction	-0.10	-0.29	0.01	Rejected
4	Responsiveness → Customer satisfaction	0.46	3.57	0.21	Accepted
5	Customer satisfaction → Customer loyalty	1.02	8.74	1.04	Accepted
6	Customer loyalty → Service usage	0.80	9.85	0.64	Accepted
7	Customer loyalty → Word-of-mouth	-0.41	-4.16	0.17	Reverse hypothesis accepted
8	Customer loyalty → Repurchase intention	0.74	8.05	0.55	Accepted

Based on the results of hypothesis testing, the degree of influence of the constructs in the model can be ranked. Figures below display the LISREL revised model output in the standardized estimates and significance values states.

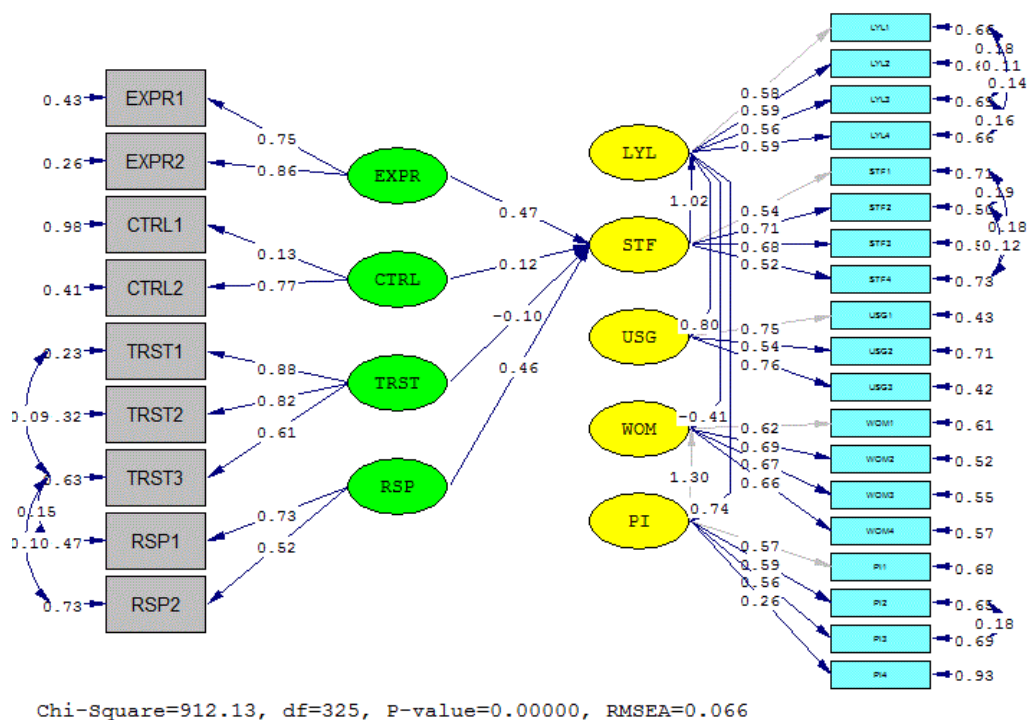


Figure 2. Revised model in standardized estimates

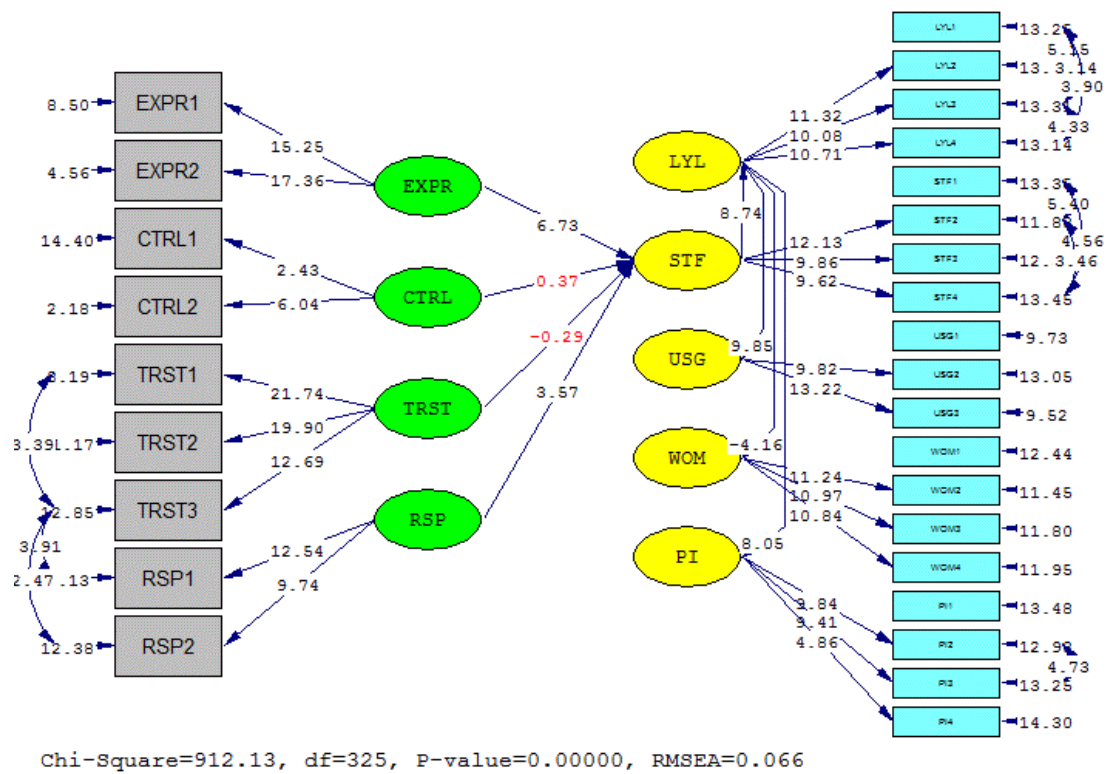


Figure 3. Revised model in significance values

According to the above results, Tables 3 through 5 specify the total effects (sum of direct and indirect effects) of influencing factors on each dimension of customer lifetime value.

Table 3. Ranking of Influencing Variables on Repurchase Intention

Influencing Factors	Direct Effect	Indirect Effect	Total
Purchase experience	0.00	0.471.020.74	0.35
Responsiveness	0.00	0.461.020.74	0.34
Customer satisfaction	0.00	1.02*0.74	0.75
Customer loyalty	0.74	0.00	0.74

Table 4. Ranking of Influencing Variables on Word-of-Mouth

Influencing Factors	Direct Effect	Indirect Effect	Total
Purchase experience	0.00	0.471.02-0.41	-0.193
Responsiveness	0.00	0.461.02-0.41	-0.192
Customer satisfaction	0.00	1.02*-0.41	-0.418
Customer loyalty	-0.41	0.00	-0.41

Table 5. Ranking of Influencing Variables on Service Usage

Influencing Factors	Direct Effect	Indirect Effect	Total
Purchase experience	0.00	0.471.020.80	0.38
Responsiveness	0.00	0.461.020.80	0.37
Customer satisfaction	0.00	1.02*0.80	0.816
Customer loyalty	0.80	0.00	0.80

Table 6. Classification of Influencing Variables on Customer Lifetime Value

Influencing Factors	Total Effect
Online service quality dimensions	0.537
Offline service quality dimensions	0.518

Tables 3 to 5 show the degree of influence of each variable of the model on the dimensions of customer lifetime value and the total effects. The overall results indicate that among these dimensions, the service usage dimension received the highest influence from the model variables and plays the most significant role in shaping customer lifetime value. Based on the results, word-of-mouth is the variable that received negative influence from the model variables and thus has an inverse effect in the calculation of customer lifetime value. The variable of repurchase intention also has a desirable effect on predicting customer lifetime value. On the other hand, customer satisfaction and customer loyalty both play favorable roles in explaining the dimensions of customer lifetime value, although loyalty has an inverse relationship with word-of-mouth, which will be elaborated upon later.

In the categorization of online service quality dimensions versus offline service quality dimensions presented in Table 6, it is shown that online service quality, with an impact of 53% and a slight difference compared to offline service quality, has a greater effect on the formation of customer lifetime value. Finally, the direct effects, indirect effects, and total effects of quality dimension variables on latent variables, together with the coefficient of determination (R^2) related to the regression relationship of each endogenous variable, are presented in the following table:

Table 7. Direct, Indirect, and Total Effects of Service Quality Dimension Variables on Latent Variables

Variable	Direct Effect	Indirect Effect	Total Effect	Additional Notes
Trustworthiness	-0.10 (Not confirmed)	-	-	R^2 not confirmed
Responsiveness	0.46	-	0.46	$R^2 = 61\% / 64\%$
Purchase experience	0.47	-	0.47	
Customer control	0.12 (Not confirmed)	-	-	Not confirmed
Trustworthiness	-	-0.07 (Not confirmed)	-	$R^2 = 35\% / 20\% / 41\%$
Responsiveness	-	0.35	0.35	
Purchase experience	-	0.35	0.35	
Customer control	-	0.09 (Not confirmed)	-	Not confirmed

Since the Sobel test is used to examine the significance of a mediating variable in the relationship between an independent and dependent variable, the Sobel statistic can be obtained using two approaches. In the first method, regression coefficients (i.e., path coefficients) and standard error are used, while in the second method, the t-statistic is employed. If the obtained Sobel statistic is greater than 1.96, this indicates that the null hypothesis (stating that the mediating variable has no role in the relationship between the independent and dependent variables) is rejected at the 0.05 error level, and the mediating effect in this relationship is significant.

Table 8. Sobel Test Statistic Values

Independent Variable	Mediating Variable	Dependent Variable	t-value
Trustworthiness	Customer satisfaction	Customer loyalty	-0.29
Responsiveness	Customer satisfaction	Customer loyalty	3.30
Purchase experience	Customer satisfaction	Customer loyalty	5.33
Customer control	Customer satisfaction	Customer loyalty	0.37
Customer satisfaction	Customer loyalty	Repurchase intention	5.92
Customer satisfaction	Customer loyalty	Word-of-mouth	-3.76
Customer satisfaction	Customer loyalty	Service usage	6.54

As is evident from the t-values in the table, the mediating role of customer satisfaction between responsiveness and purchase experience with the dependent variable of customer loyalty is clear and evident, and a significant indirect effect exists between the variables mentioned. However, the mediating role of customer satisfaction between trustworthiness and customer control does not have sufficient clarity in the Sobel test results, and it may be hypothesized that a direct effect exists between these variables and customer loyalty.

4. Discussion and Conclusion

The results of the present study highlight the critical role of service quality dimensions—both online and offline—in shaping customer lifetime value within platform-based businesses, with customer satisfaction and loyalty serving as mediating variables. Findings showed that online service quality dimensions exerted slightly greater influence than offline service quality dimensions, reflecting the increasing centrality of digital interactions in shaping customer perceptions. This is consistent with the growing body of research that emphasizes the primacy of digital service quality in the digital economy [8, 9]. In addition, satisfaction and loyalty emerged as pivotal mediators, confirming that customer value is not merely derived from service quality itself but from the relational mechanisms that translate service experiences into long-term behavioral outcomes [3, 5].

The first major result concerned the strong positive effect of purchase experience and responsiveness on customer satisfaction. Customers who perceived their interactions with the platform as smooth, reliable, and responsive reported higher levels of satisfaction. These results align with the findings of Ahmadi and Abadi (2015), who established the direct role of service quality in building trust and satisfaction in the travel agency sector [5]. Similarly, Khaleh and Ganji (2018) noted that responsiveness and reliability in urban service delivery substantially improved tourists' satisfaction [7]. The consistency of these results across industries reinforces the conclusion that responsiveness and quality of the purchase process remain universal drivers of satisfaction, even in digital platforms where automated systems are dominant.

A second significant finding was that trustworthiness and customer control did not exert meaningful effects on satisfaction. Contrary to expectations, customers did not perceive these variables as central to their satisfaction with the platform. This result diverges from earlier studies, such as Mahdavi and Abed (2014), who emphasized that trust is a fundamental determinant of loyalty in the insurance industry [13]. Similarly, Jia-Yin et al. (2014) argued that customer characteristics, including perceptions of control, significantly influence lifetime value in Chinese mobile data services [6]. One possible explanation for the divergence is contextual: in ride-hailing platforms like Snapp, operational efficiency and immediate service responsiveness may overshadow abstract constructs such as control or trust, which could be taken for granted once basic functionality and transparency are achieved.

Perhaps the most surprising result relates to the inverse relationship between loyalty and word-of-mouth. While traditional models suggest that loyal customers become advocates for the brand, this study found the opposite: higher loyalty scores correlated with lower positive word-of-mouth. This reverse hypothesis is supported by the statistical evidence, indicating that although customers may continue to use the platform out of necessity or convenience, they may not actively recommend it to others. This finding partially resonates with the conclusions of Hosseinzadeh Shahri et al. (2022), who highlighted the complex nature of loyalty in digital platforms shaped by network effects [3]. It also suggests that loyalty in platform ecosystems might be driven by switching costs or lack of alternatives rather than genuine emotional attachment, an insight that aligns with Subramanian et al. (2014), who demonstrated that competitiveness in Chinese e-retailing depends on a nuanced interplay of quality, satisfaction, and competitive dynamics [12].

The positive mediating role of satisfaction between responsiveness, purchase experience, and loyalty confirms long-established theories of customer relationship management. Minhaj and Khan (2025) also showed that in e-banking environments, satisfaction plays a mediating role between service dimensions and loyalty [9]. Likewise, Kim and Yang (2025) identified satisfaction as the bridge between digital service quality and brand loyalty in the banking industry [8]. By reaffirming these relationships in the platform economy of Iran, this study demonstrates the robustness of satisfaction as a mediating construct across cultural and industrial contexts.

Results from the Sobel test further reinforce this mediating effect. Satisfaction significantly mediated the relationships of responsiveness and purchase experience with loyalty, while no significant mediation was observed for trustworthiness or control. This pattern mirrors the findings of Kursia and Khan (2018), who identified responsiveness as a more critical driver of online banking satisfaction than trust in Bangladesh [16]. It also reflects the context-specific role of quality attributes: while trust may be critical in financial or insurance services [13], responsiveness appears more salient in on-demand mobility services where immediacy is essential.

Another noteworthy aspect of the findings concerns the dominance of the service usage dimension in shaping customer lifetime value. Among the dimensions examined, actual usage was the most strongly influenced by the mediating constructs and had the greatest overall contribution to long-term value. This outcome is consistent with Jia-Yin et al. (2014), who emphasized usage as the ultimate determinant of lifetime value in mobile data services [6]. Moreover, Ghadiridehkordi et al. (2025) suggested that integrating digital analytics and sentiment mining can provide platforms with better insights into customer usage behavior and satisfaction [14]. These findings imply that platforms should prioritize strategies that enhance usage frequency and depth, as these translate most directly into customer lifetime value.

The comparative effect of online and offline service quality dimensions also deserves emphasis. Results demonstrated that online service quality had a slightly stronger effect (53%) compared to offline quality (51.8%). This marginal difference highlights the increasing centrality of digital interfaces, a conclusion also supported by Parsakia and Jafari (2023), who noted that artificial intelligence and digital engagement tools enhance customer interaction and long-term value creation [17]. At the same time, offline quality cannot be ignored, particularly in hybrid service models like Snapp, where driver behavior and vehicle conditions remain important. Shaughnessy (2016) observed that successful platforms must balance technological efficiency with human-centered interactions to sustain disruptive innovation [4].

The inverse effect of loyalty on word-of-mouth requires deeper theoretical reflection. Tahir et al. (2024) emphasized the role of brand image in mediating the relationship between satisfaction and loyalty, showing that positive perceptions of brand image drive favorable word-of-mouth [15]. In the case of Snapp, the brand image may not be sufficiently strong to convert loyalty into advocacy. Instead, loyalty could be driven by necessity rather than brand attachment, explaining the observed negative relationship. This interpretation is also supported by David-West et al. (2016), who documented the fragility of platform ecosystems in Sub-Saharan Africa, where users may rely on platforms due to lack of alternatives rather than strong brand preferences [10]. Thus, platforms in emerging economies may need to invest more heavily in brand-building and customer experience to transform passive loyalty into active advocacy.

The application of structural equation modeling (SEM) in this study also affirms the methodological utility of this approach. Mohsenin and Esfidani (2014) argued that SEM is uniquely suited to evaluating complex relationships among service quality, satisfaction, and loyalty constructs [11]. This study adds to that body of evidence by demonstrating how SEM can reveal both expected and unexpected patterns, such as the inverse

loyalty–word-of-mouth relationship. Subramanian et al. (2014) similarly showed that SEM can uncover nuanced quality–satisfaction–competitiveness dynamics in e-retailing [12]. The alignment of methodological choices across these studies demonstrates the reliability of SEM in evaluating platform service models.

Finally, the findings hold important implications for strategy and management of platform businesses in Iran and other emerging markets. Ebrahimi Shahrabadi et al. (2024) underscored the importance of strategic frameworks to overcome challenges in launching and scaling digital platforms [1]. Rafieian Isfahani (2022) argued that platform businesses require distinctive strategies aligned with their digital and network-driven nature [2]. This study contributes to these strategic discussions by providing empirical evidence on how service quality dimensions interact with satisfaction and loyalty to shape long-term value. The observed importance of online service quality, coupled with the unexpected findings about loyalty and word-of-mouth, suggests that platforms like Snapp must not only focus on operational efficiency but also on building trust, enhancing brand image, and investing in customer engagement strategies that translate loyalty into advocacy.

Despite its contributions, this study has several limitations. First, it focused exclusively on one platform business, Snapp, within the Iranian market. While this provides a deep contextual analysis, it limits the generalizability of results to other industries or geographical contexts. Second, the study relied on self-reported data collected through questionnaires, which may be subject to biases such as social desirability or recall limitations. Third, while SEM and Sobel testing provide powerful tools for analyzing mediating effects, they do not capture longitudinal dynamics; therefore, changes in satisfaction, loyalty, and service quality perceptions over time could not be observed. Finally, the study measured service quality using a cross-sectional design, which does not account for how digital transformation and competitive shifts might influence customer perceptions in the future.

Future research should extend this study in several directions. Comparative studies across multiple platforms and industries would help to test the generalizability of the findings, especially the unexpected inverse relationship between loyalty and word-of-mouth. Longitudinal research designs could capture the evolution of satisfaction and loyalty as platforms adapt to technological and market changes. In addition, integrating digital behavioral data, such as app usage metrics or sentiment analysis from online reviews, could complement self-reported measures and provide richer insights. Researchers might also examine the role of brand image, trust, and switching costs as moderators to explain why loyalty does not always translate into advocacy in platform contexts. Finally, cross-country studies in emerging economies would be valuable for identifying cultural or institutional differences in the service quality–satisfaction–loyalty nexus.

For practitioners, the results of this study underscore the need to prioritize responsiveness and purchase experience as key drivers of customer satisfaction. Platform managers should recognize that loyalty alone may not guarantee positive advocacy and must invest in brand-building and customer experience strategies to foster active promotion. Emphasizing digital service quality while maintaining offline service standards will be critical in hybrid platforms like Snapp. Managers should also adopt advanced analytics tools to monitor customer behavior and sentiment in real time, enabling proactive responses to dissatisfaction. Overall, sustaining customer lifetime value requires an integrated strategy that balances operational excellence, digital innovation, and relational engagement.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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References

- [1] A. Ebrahimi Shahrabadi, N. Nooberi, and A. Mobini Dehkordi, "Presenting a Model for Selecting Strategies to Overcome the Challenges of Launching Digital Platforms: An Approach Based on Critical Challenge Factors and Critical Success Factors," *Journal of Business Management Perspective*, no. 58, pp. 80-99, 2024.
- [2] M. Rafieian Isfahani, "Business Strategy for Digital Platform Businesses," *Modern Research in Entrepreneurship and Business Development*, vol. 1, pp. 171-193, 2022.
- [3] M. Hosseinzadeh Shahri, N. Mansouri, and M. Ghasemi, "The Consequences of User Loyalty in Platforms from the Perspective of Network Effects," *Journal of Business Management Perspective*, no. 52, pp. 63-85, 2022.
- [4] H. Shaughnessy, "Harnessing platform-based business models to power disruptive innovation," *Strategy & Leadership*, vol. 44, no. 5, pp. 6-14, 2016, doi: 10.1108/SL-07-2016-0061.
- [5] S. A. A. Ahmadi and H. A. D. Abadi, "Investigating the Relationship Between Service Quality, Satisfaction, Trust, and Loyalty Among Customers (Case Study: Active Travel Agencies in Tehran City Terminals)," *Journal of Development and Transformation Management*, vol. 23, pp. 11-20, 2015.
- [6] Q. Jia-Yin, Q.-X. Qu, Y.-P. Zhou, and L. Li, "The impact of users' characteristics on customer lifetime value raising: evidence from mobile data service in China," *Information Technology Management*, 2014.
- [7] A. N. H. Khaleh and N. Ganji, "Measuring Tourists' Satisfaction with the Quality of Urban Services Using the Kano Model (Case Study: Tehran's Nahjolbalaghe Park)," *Urban Tourism*, vol. 5, no. 2, pp. 121-134, 2018.
- [8] S. H. Kim and Y. R. Yang, "The Effect of Digital Quality on Customer Satisfaction and Brand Loyalty Under Environmental Uncertainty: Evidence from the Banking Industry," *Sustainability*, vol. 17, no. 8, p. 3500, 2025, doi: 10.3390/su17083500.
- [9] S. M. Minhaj and M. A. Khan, "Dimensions of E-Banking and the Mediating Role of Customer Satisfaction: A Structural Equation Model Approach," *International Journal of Business Innovation and Research*, vol. 36, no. 1, pp. 42-57, 2025, doi: 10.1504/IJBIR.2025.143944.
- [10] O. David-West, I. O. O. Umukoro, and R. O. Onuoha, "Platforms in Sub-Saharan Africa: Startup Models and the role of Business Incubation," *Journal of Intellectual Capital*, 2016.
- [11] S. Mohsenin and M. Esfidani, *Structural Equation Modeling Using LISREL Software*. Mehraban Book Publishing, 2014.
- [12] N. Subramanian, A. Gunasekaran, J. Yu, J. Cheng, and K. Ning, "Customer satisfaction and competitiveness in the Chinese E-retailing: Structural equation modeling (SEM) approach to identify the role of quality factors," *Expert Systems with Applications*, 2014, doi: 10.1016/j.eswa.2013.07.012.
- [13] G. Mahdavi and M. Abed, "Investigating Factors Affecting Customer Loyalty in the Life Insurance Industry," 2014, in The 21st National and 7th International Conference on Insurance and Development.
- [14] A. Ghadiridehkordi, J. Shao, R. Boojihawon, Q. Wang, and H. Li, "Leveraging sentiment analysis via text mining to improve customer satisfaction in UK banks," *International Journal of Bank Marketing*, vol. 43, no. 4, pp. 780-802, 2025, doi: 10.1108/IJBM-05-2024-0323.
- [15] A. H. Tahir, M. Adnan, and Z. Saeed, "The impact of brand image on customer satisfaction and brand loyalty: A systematic literature review," *Heliyon*, vol. 10, pp. 1-10, 2024, doi: 10.1016/j.heliyon.2024.e36254.
- [16] J. Kursia and F. Khan, "Assessment of the Factors Influencing Online Banking Customer Satisfaction: A Banking Perspective in Bangladesh," *World Journal of Social Sciences*, vol. 8, no. 1, pp. 142-158, 2018.
- [17] K. Parsakia and M. Jafari, "Strategies for Enhancing Customer Engagement Using Artificial Intelligence Technologies in Online Markets," *Journal of Technology in Entrepreneurship and Strategic Management (JTESM)*, vol. 2, no. 1, pp. 49-69, 05/29 2023, doi: 10.61838/kman.jtesm.2.1.6.

