Assessment of Service Quality and Innovation in Developing Customer Loyalty; The mediating role of Customer Commitment and Satisfaction

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ABSTRACT

The study's objectives were to investigate the nexus of service quality and innovation in developing customer loyalty, with customer commitment and satisfaction as mediating. To address this issue, a quantitative investigation was carried out by a researcher in Pakistan. The primary study material was assembled through a survey questionnaire, with a sample population of approximately 369 individuals, which included Pakistani citizens who made online purchases. SEM (Hypotheses testing) showed a strong positive correlation between the variables service quality, service innovation, market orientation, customer commitment, customer satisfaction and customer loyalty. Limitations and future implications, as well as practical and theoretical implications, are discussed at the end of this paper.

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1. Introduction

Customer loyalty has been mentioned in previous research, but it is one of the most complicated situations for the hospitality industry. The industry's high ambiguity is the primary justification for high-ranking companies' inability to gain loyalty (Aramburu & Pescador, 2019). Many previous research investigations have demonstrated managers' failure to achieve substantial consumer loyalty levels while generating revenue, yet more literature still needs to be on the subject. They needed help identifying the characteristics promoting customer loyalty (Cheng, Gan, Imrie, & Mansori, 2018; Rather & Hollebeek, 2019).

Furthermore, because of its critical role in corporate performance, customer loyalty has become an essential determinant in the marketplace (Bahri-Ammari & Bilghian, 2019; Paparoidamis, Katsikeas, & Chumpitaz, 2019). Customer loyalty, on the other hand, takes time to come. It necessitates significant business effort, money, and time (Izogo, 2017; Nyadzayo & Khajehzadeh, 2016; Tseng, 2017). Because of the importance of loyalty to earnings, businesses have greatly emphasized improving loyalty and have spent substantial resources on HRM (Chiang, Han, & McConville, 2018). Many businesses need more strategies and resources to acquire client loyalty (Cheng et al., 2018; Herhausen, Ludwig, Grewal, Wulf, & Schoegel, 2019; Wolter, Bock, Smith, & Cronin, 2017). Many investigations have aimed to explore the impact of many aspects of customer loyalty, including customer engagement (So, King, Sparks, & Wang, 2016), Customer trust (Stathopoulou & Balabanis, 2016), satisfaction (Schirmer, Ringle, Guderan, & Feistel, 2018), commitment (Tabrani, Amin, & Nizam, 2018), and other criteria (Marakanon & Panjakajornsak, 2017), as well as peers. Consequently, the latest investigation seeks to investigate the effect of service innovation, service quality, and market orientation on service loyalty, with customer commitment and satisfaction acting as a mediator.

We have studied service innovation, service quality, market orientation, and service loyalty with the mediating role of Customer commitment and satisfaction. Due to this problem,
a research gap emerges in Pakistan. To fulfill this particular gap research will be conducted. Therefore, this study will provide insight into this.

We have explored service innovations and service quality practices and processes in the brands to make customers loyal. It may be the community sector or the isolated sector. In addition, the results vary by industry and are the same as countries due to an insufficient understanding of service innovation and service quality in Pakistan's Brands industry. Different brands need help in making intelligent service innovations and service quality practices. Compared with modern times, most industries rely on innovation and quality to make their customer loyal to gain a competitive advantage.

This paper aimed to fill a literature shortage by investigating the nexus of service quality and innovation in developing customer loyalty, with customer commitment and satisfaction mediating. To address this issue, a quantitative investigation was carried out by a researcher in Pakistan. This research's primary goals are to assess service innovation's effects on customer commitment. To ascertain the impact of service innovation on customer satisfaction, To investigate the impact of service quality on customer commitment, To investigate the relationship between service quality and customer satisfaction, To investigate the impact of market orientation on customer commitment, To investigate the impact of market orientation on satisfaction, To investigate the impact of customer commitment on service loyalty, as well as the relationship between satisfaction and service loyalty.

1.1. Research Questions
• What is the influence of service quality on customer commitment?
• What is the relationship of service quality with customer satisfaction?
• What is the influence of service quality on customer commitment?
• What is the relationship of service innovation with customer satisfaction?
• What is the impact of market orientation on customer commitment?
• What is the influence of market orientation on customer satisfaction?
• What is the relationship of customer commitment with customer loyalty?
• What is the association of customer satisfaction with customer loyalty?

1.2. Organization of Study
The following section generates hypotheses and provides a literature review of this article's topics. After that, we cover the study methods, along with the investigation model's reliability and model assessment outcomes. In addition, we present the summary, their conceptual and organizational significance, the experiment's limitations, and their future possibilities.

2. Literature Review
2.1. Service Innovation
Service innovation is a powerful resource for promoting new services, refining current ones, and improving SQ (Berry, Phinney, Sam, & Vedder, 2006; Cheng et al., 2018). Service companies' long-term sustainability is determined by whether they incorporate service innovation into their efforts to provide excellent services to their clients. According to Jansen, Van Den Bosch, and Volberda (2006), two kinds of services are available: SI adventure (described as the conduct of a service organization conducted toward its introduction of new services) and service innovation exploitation (defined as a service firm's actions aimed toward the advancement or refinement of current services).

2.2. Service Quality
The presumed choices resulting from an assessment in which customers correspond their attitudes with what they think they have earned are service quality (Meesala & Paul, 2018). According to Abror et al. (2020), the quality of service is measured by its conformance with the user's wants and needs, and the best the match, the greater the enjoyment. Consumer happiness is influenced by SQ. According to Razak et al. (2019), SQ is a company's ability to fulfill client requirements. According to (Gross, Ingerfurth, & Willems, 2021; Padlee, Reimers, Mokhlis, Anuar, & Ahmad, 2020), SQ controls how well a firm's level of service meets customer demand. Service quality is defined as consistency to needs of customers in the delivery of services.
2.3. **Market Orientation**

Market orientation is a business plan perception that promotes a firm's capacity to supply best goods and services to both inside and outside consumers (Crick, 2021). Market orientation is a term used frequently by online marketers to describe the execution of promotional impression (Distanont & Khongmalai, 2020; Zebal, Ferdous, & Chambers, 2019). A market-oriented civilization, or how an association comprehends the requirement of the customer, wishes, and expectations, can assist a business to run more efficiently (Andiyanto, Miyasto, & Sufian, 2017).

2.4. **Customer Commitment**

Arantola (2000) defines commitment as the intention to acquire items and have the order to achieve universal for the business. Ideas and shared concerns about the difficulties of changing goods or services may be fundamental values for commitment. A two-way relationship is a commitment. The client and the provider establish a powerful connection to guarantee a firm commitment. The durability of the agreement between the customer and the provider is called commitment. Customers’ commitment is critical in achieving a company objective in a digital services context; hence merchants often control CX to generate commitment (Keiningham et al., 2017; Lemon & Verhoef, 2016; Srivastava & Kaul, 2016).

2.5. **Customer Satisfaction**

Customer satisfaction is the mental condition of purchasers when their aspirations before consuming a good encounter or surpass their natural purchasing behavior (Oghuma, Libaque-Saenz, Wong, & Chang, 2016). CS is the totality of a user's conceptions, assessments, and behavioral responses to the expertise of a service or good; consequently, it is considered immaterial because only purchasers who use or utilize goods can quantify satisfaction with it (Benoit et al., 2020). Because the hospitality industry is a component of the business world, CS is critical if businesses in this industry would like to continue to compete (Cheng et al., 2018).

2.6. **Customer Loyalty**

Customer loyalty is a significant component of client experience Kamran-Disfani, Mantrala, Izquierdo-Yusta, and Martínez-Ruiz (2017). According to Han, Kiatkawsin, and Kim (2019), loyal clients benefit any company considerably, including a consistent profit flow and lower brand management expenses. CL has attracted a great deal of interest in the service marketing literature because it assists delivery companies in establishing long-term competitiveness (M. Lee & Cunningham, 2001). CL has already been considered the primary factor in a company's performance (Wah Yap, Ramayah, & Nushazelin Wan Shahidan, 2012). Kim, Park, and Jeong (2004) discovered that CL was inextricably allied to the company's continuing existence and the impact of potential planned development.

2.7. **Service Quality and Customer Commitment**

Maskur, Qomariah, and Nursaidah (2016) define customer satisfaction as clients' general approach to products and offerings after using them. Client satisfaction happens when consumers align their impressions of an item's or provider's quality with their objectives. Customer satisfaction is a feature that fosters trust, which can lead to increased customer satisfaction and demand for the organization. Consumers who quickly would be dedicated to products or services, forming willingness in the consumer to continue interactions with the firm, forming a fast connection between the two sides. Customer commitment will decline if customer satisfaction decreases; if client satisfaction improves, consumer commitment will grow dramatically (Wiranata & Hersin, 2021).

H1: Service quality has a beneficial effect on customer commitment

2.8. **Service Quality and Customer Satisfaction**

Businesses and organizations put in a lot of effort to make sure their customers are satisfied, especially if they want to keep them as long-term clients. This is particularly true in the retail banking industry, where companies are struggling to improve customer satisfaction but are not entirely sure which service quality features are most important (Belás & Gabčová, 2016; Chavan & Ahmad, 2013). In a study conducted by Herington and Weaven (2009); Hu, Kandampully, and Juwaheer (2009) shown that service quality has a significant impact on customer satisfaction.
H2: Service quality has positive impression on satisfaction.

2.9. Service Innovation and Customer Commitment
Customers are more motivated to work harder and be more innovative when they are committed to their company (Yuliani, Syahrul, Lukito, & Hidayat, 2021). When customers are happy with a company's product or service, they are emotionally committed to that company, according to Raveendran and Gamage (2019). When a customer plans to buy from a company again is a form of commitment that happens after purchasing a product or service Ghassani and Suryoko (2017).

H3: Service innovation has positive effect on customer commitment.

2.10. Service Innovation and Customer Satisfaction
In particular, consumers' judgments of service innovation are referred to as innovativeness. The other sort of satisfaction, total contentment, is recognized as innovativeness. This concept differs from client satisfaction in that clients are more inclined to provide feedback and evaluations from a worldwide perspective, demonstrating their overall views and reactions toward customer satisfaction (J.-S. Lee, Choi, & Chiang, 2017; Ordanini, Parasuraman, & Rubera, 2014). Consumers will experience transactional pleasure each time they interact with the services, but overall satisfaction will significantly impact consumer attitudes toward them (Gao & Lai, 2015; J.-S. Lee et al., 2017; J. C. Lee, Backman, & Backman, 2018).

H4: Service innovation has helpful control on satisfaction.

2.11. Market Orientation and Customer Commitment
Market orientation features include customer focus, positioning strategy, and inter-functional partnership (Azam et al., 2014; Narver & Slater, 1990). According to Al-Hawari (2011), customer commitment is one of the most significant components in sustaining a healthy supplier-customer relationship.

H5: Market orientation has positive impact on customer commitment.

According to O'Cass and Ngo (2011), market orientation enhances consumer involvement and creates marketing capacity. According to Urde (1999), brand orientation serves as the foundation for the company's contact with consumers and satisfies client demands and desires. According to Ramani and Kumar (2008), customer empowerment is a crucial consumer connecting practice that changes customer experiences and results in client satisfaction. Previous study of Saraswati (2022) and Pattanayak, Koilakuntla, and Puniyatoya (2017) confirmed that there is positive relationship of market orientation in development of customer satisfaction.

H6: Market orientation has positive impact on satisfaction.

2.13. Customer Commitment and Customer Loyalty
Commitment is required for a lengthy, meaningful connection (Morgan & Hunt, 1994). It is a sense of personal affiliation, concern for prospective well-being, and loyalty (Garbarino & Johnson, 1999). Commitment is the mental bond leading to CL (Izogo, 2017). Pool, Pool, and Manjiri (2018) found that commitment considerably influenced loyalty in their investigation. Moreover, Han et al. (2019) discovered a link between commitment and consumer loyalty.

H7: Customer commitment has positive impact on customer loyalty.

Customer satisfaction has a major and beneficial impact on customer loyalty (Ganiyu, 2017). D. Clemes, A. Cohen, and Wang (2013) discovered in their study of international information advertising in New Zealand that consumer satisfaction is the foundation of customer loyalty. According to Yasa and Kerti (2018), e-satisfaction has a beneficial and substantial
influence on e-loyalty. Additionally, Rasmiati and Yasa (2019) discovered that customer satisfaction had a positive and substantial influence on customer loyalty in their research in the grocery retail sector.

H8: Satisfaction has positive impact on customer loyalty.

3. Methodology and Data Collection
   This study emphasizes the importance of organizational elements in influencing and contributing to customer loyalty in Pakistan. To find such factors, the study examined through a variety of databases, books, theses, papers, theoretical and empirical studies, and other sources. The objective of this work was to fill a research problem by conducting a large investigation into the effect of SQ and innovation on developing CL; with the mediating role of customer commitment and satisfaction. Quantitative research approach was adopted as the greatest match for this study due to the appropriateness of the research nature (i.e., deductive method). The deductive method was used in this investigation. The researcher used a random sample approach in this study to collect the data from respondents. Starting with a proven science (e.g., UTAUT), hypotheses were formed, data has been gathered, and hypothesis acceptance/rejection was made as needed to arrive at a given result.

3.1. Measurement Scale
   This investigation's item measures were adapted from prior studies. SI (Five items) from Grawe, Chen, and Daugherty (2009). For measuring the item of SI, a five-point Likert scale was utilized, with (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree). The scale for SI was adopted from the study of Z.-L. He and Wong (2004) with eight items. The scale for SQ was taken from Wang, Lo, and Yang (2004) (three items). Three fourteen items were adapted from measured MO (Fourteen items). The scale for CC was taken from Bansal, Irving, and Taylor (2004) and Meyer, Allen, and Gellatly (1990) (Three items). The scale for CS was derived from Maxham and Netemeyer (2002) (four items). Three items were adapted from a previous study by H. He and Mukherjee (2007) to measure CL (three items).

3.2. Sample and Data Collection
   The sample size of 400 respondents was determined using individuals on social media who purchase products via social media. Because of its advantages, the researchers used a non-probability approach on the 400 people. The investigator gathered information from students, government employees, private employees, and business people in Pakistan. Researcher collects data from four districts of Pakistan (i.e. Rajanpur, Dera Ghazi Khan, Multan and Lahore). In the present investigation, the investigator chose a sample size of 400, but only 380 survey answers were gathered. Given the highly abnormal values, 11 of the 380 returned questionnaires were
not assumed for data processing. The primary study material was assembled through a survey questionnaire, with a sample population of approximately 369 individuals, which included Pakistani citizens who made online purchases. The information was gathered using a five-point Likert scale with pins (1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree). The researcher used a random sample approach in this study.

4. Results

4.1. Reliability Analysis

As calculated by SPSS, we can see that Cronbach’s Alfa for the items used in service innovation is 0.708 for five items used in the questionnaire, which means that the items are considered acceptable and can be used to conduct the research. Service quality is recorded as 0.666 in Cronbach’s Alpha analysis. It is also considered acceptable for the items in the questionnaire, and further research can be initiated. Cronbach’s Alpha in market orientation is 0.900 for fourteen items used in the questionnaire, making it excellent for conducting the research. Cronbach’s Alpha for customer commitment is .671 for three items. This value shows that the items are acceptable and can be used in research. The variable customer satisfaction has a Cronbach’s Alpha of 0.747 for the three items used in the research. It shows that the items are considered suitable for the research, and further research can be conducted using them. Cronbach’s Alpha of CL is 0.613 for the three items used in the questionnaire. These values show that the items used in the questionnaire range from acceptable to excellent, and we can further continue our research using these variables.

<table>
<thead>
<tr>
<th>Table 1: Reliability Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Innovation</td>
</tr>
<tr>
<td>Service Quality</td>
</tr>
<tr>
<td>Customer Loyalty</td>
</tr>
</tbody>
</table>

4.2. Demographic Analysis

The maximum number of respondents were female, with a frequency of 200 unique individuals, 54.2% of the total. While the remaining 45.8% of respondents were male and willingly completed the research questionnaire.

The highest number of respondents ranged from 18 to 24, 65.6%. The second highest respondents' age ranges from 25 to 34 years, 22.8%. While 35 to 44 were just 28 members, and participants over 45 were just 15 individuals.

The maximum number of respondents were students, whose total respondents were 261 unique individuals, which is 70.7 percent of the total. While the lowest number of respondents were entrepreneurs, which had 17 individuals and were just 4.6 percent of the total. 46 individuals were government employed, and 45 were privately employed and actively participated in the survey.

In the above results, we can see that 45 individuals had education levels below intermediate. In contrast, the highest were those who have completed a bachelor's degree, with 297 individuals. In comparison, 27 respondents have completed their master's or Ph.D.

The results show that the maximum number of respondents were residents of Dera Ghazi Khan, which counted 262 individuals. While 12.7 percent of respondents were from Lahore and 11.9 percent of individuals were from Multan. The least number of participants were from Rajanpur who completed the research questionnaire.

The above table shows how many years our respondents have been using the selected brands. The above table clearly explains that 182 individuals were new movers with 0 to 3 years of product purchasing and were among the highest among the respondents. While further, we can see that 39.3 percent of respondents purchased the selected brands from 4 to 6 years. While 30 individuals were using the brands for 7 to 9 years. And only 12 individuals were those who have been using the selected brand for a decade.
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4.3. Descriptive Analysis

The mean values define the average of responses, and the standard deviation shows how much the data deviates from the mean. The mean of service innovation is 6.358, with a SD of .504. The mean of market orientation is 6.541 and a standard deviation of .473. As we can see, SQ has a mean of 6.50 and a standard deviation of .608. Further, in customer satisfaction, the mean value is 6.512 and has a standard deviation of .535, which shows how much it deviates from the mean. At the same time, customer commitment and loyalty have a mean of 6.511 and 6.546, respectively, and a standard deviation of .580 and .516, respectively.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI</td>
<td>369</td>
<td>4.80</td>
<td>7.00</td>
<td>6.3583</td>
<td>.50400</td>
</tr>
<tr>
<td>MO</td>
<td>369</td>
<td>3.93</td>
<td>7.00</td>
<td>6.5410</td>
<td>.47307</td>
</tr>
<tr>
<td>SQ</td>
<td>369</td>
<td>3.00</td>
<td>7.00</td>
<td>6.5041</td>
<td>.60846</td>
</tr>
<tr>
<td>CS</td>
<td>369</td>
<td>2.75</td>
<td>7.00</td>
<td>6.5271</td>
<td>.53538</td>
</tr>
<tr>
<td>CC</td>
<td>369</td>
<td>2.67</td>
<td>7.00</td>
<td>6.5113</td>
<td>.58043</td>
</tr>
<tr>
<td>CL</td>
<td>369</td>
<td>5.00</td>
<td>7.00</td>
<td>6.5465</td>
<td>.51694</td>
</tr>
</tbody>
</table>

4.4. Correlation Analysis

Correlation analysis describes the link among two possible factors. It shows the affiliation among the variables varying from weak to perfect. The relationship is determined based on three indicators: sign, value, and strength. As we can see in the above table shows, the relationship of one variable with other. In the table, we can see that service innovation has a friendly connection to market orientation which is 0.818, while its relationship with service quality is 0.534. The above table also shows that SI has a healthy bond with CS which is 0.759. There is a connection among SI and CC of 0.687. At the same time, SI has a positive relationship with CL of 0.635, which shows a relationship. In the above table, we can see the relationship between MO with SQ 0.532 and a strong positive relation with CS of 0.872. MO has a strong positive relationship of 0.770 with CC, and its relationship with CL is significant 0.640. In the table above, the relationship between SQ with CS, CC, and CL is 0.465, 0.501, and 0.467, which all show a positive relationship with SQ. At the same time, CS has a positive, strong relationship with CC, with a relationship of 0.713. And its relationship with CL is significance at the value of 0.563. CC has a positive relationship with CL which has a significance at 0.519. The above table shows the correlation of different variables. We can see that each variable has a positive relationship with the other and have an impact on each other; change in one may positively change or bring an impact on another variable.

<table>
<thead>
<tr>
<th>SSI</th>
<th>MO</th>
<th>SQ</th>
<th>CS</th>
<th>CC</th>
<th>CL</th>
</tr>
</thead>
<tbody>
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<td>SI</td>
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<td>.534**</td>
<td>.759**</td>
<td>.687**</td>
<td>.635**</td>
</tr>
<tr>
<td>MO</td>
<td>1</td>
<td>.532**</td>
<td>.872**</td>
<td>.700**</td>
<td>.640**</td>
</tr>
<tr>
<td>SQ</td>
<td>.534**</td>
<td>1</td>
<td>.465**</td>
<td>.501**</td>
<td>.467**</td>
</tr>
<tr>
<td>CS</td>
<td>.759**</td>
<td>.872**</td>
<td>.465**</td>
<td>1</td>
<td>.713**</td>
</tr>
<tr>
<td>CC</td>
<td>.687**</td>
<td>.770**</td>
<td>.501**</td>
<td>.713**</td>
<td>1</td>
</tr>
<tr>
<td>CL</td>
<td>.635**</td>
<td>.640**</td>
<td>.467**</td>
<td>.563**</td>
<td>.519**</td>
</tr>
</tbody>
</table>

4.5. Structural Path Model

4.5.1. Service Quality and Customer Commitment

H1 stated that Service quality has a significant influence on Customer commitment. Outcomes of SEM described that SQ was directly linked to CC. This model presented good fit χ2 = 16.461, DF = 6, P < .000, (χ2/DF) = 2.744, CFI = .977, GFI = .986, TLI = .943, NFI = .965 and RMSEA = .069. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The
homogeneous path coefficient disclosed a significant association between Service innovation on Customer commitment ($\beta = .501; p < .000$) SQ was significantly correlated with self-reported CC ($R^2 = .25; p < .000$).

### 4.5.2. Service Quality and Customer Satisfaction

H2 stated as there is an important influence of Service Quality on Customer satisfaction. Results of SEM described that SQ was directly related to CS. This model presented good fit $\chi^2 = 24.938, DF = 9, P < .000, (\chi^2/DF) = 2.771, CFI = .974, GFI = .982, TLI = .939, NFI = .961$ and RMSEA = .069. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Service innovation and customer commitment ($\beta = .637; p < .000$). SQ significantly correlated with self-reported CS ($R^2 = .21; p < .000$).

### 4.5.3. Service Innovation and Customer Commitment

H3 stated that service innovation has a significant influence on Customer commitment. Outcomes of SEM described that Quality personalization was directly related to Customer trust. This model presented good fit $\chi^2 = 36.819, DF = 17, P < .000, (\chi^2/DF) = 2.166, CFI = .972, GFI = .976, TLI = .954, NFI = .950$ and RMSEA = .056. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Service innovation on Customer commitment ($\beta = .455; p < .000$). Knowledge management enabler was significantly correlated with self-reported knowledge management practices ($R^2 = .57; p < .000$).

### 4.5.4. Service Innovation and Customer Satisfaction

H4 stated that service innovation has a major effect on Customer satisfaction. Results of SEM described that Service innovation was directly related to Customer commitment. This model presented good fit $\chi^2 = 61.652, DF = 24, P < .000, (\chi^2/DF) = 2.569, CFI = .962, GFI = .964, TLI = .943, NFI = .940$ and RMSEA = .065. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Service innovation on Customer satisfaction ($\beta = .759; p < .000$). Service innovation was significantly correlated with self-reported Customer satisfaction practices ($R^2 = .42; p < .000$).

### 4.5.5. Market Orientation and Customer Satisfaction

H5 stated that Market Orientation has a significant influence on Customer Satisfaction. Results of SEM described that Market Orientation was strongly linked with Customer Satisfaction. This model presented good fit $\chi^2 = 271.965, DF = 117, P < .000, (\chi^2/DF) = 2.324, CFI = .949, GFI = .924, TLI = .933, NFI = .914$ and RMSEA = .06. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Market orientation on Customer Satisfaction ($\beta = .872; p < .000$) SQ was significantly correlated with self-reported CC ($R^2 = .76; p < .000$).

### 4.5.6. Market Orientation and Customer Commitment

H6 stated that Market Orientation has a significant influence on Customer Commitment. Results of SEM described that Market Orientation was directly allied to Customer Commitment. This model presented good fit $\chi^2 = 244.929, DF = 98, P < .000, (\chi^2/DF) = 2.499, CFI = .945, GFI = .926, TLI = .924, NFI = .913$ and RMSEA = .06. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Market Orientation on Customer Commitment ($\beta = .475; p < .000$). MO was significantly correlated with self-reported CC ($R^2 = .59; p < .000$).

### 4.5.7. Customer Satisfaction and Customer Loyalty

H7 stated as there is a significant influence of Customer Satisfaction on Customer Loyalty. The results of SEM described that CS was strongly connected with CL. This model presented good fit $\chi^2 = 28.996, DF = 12, P < .000, (\chi^2/DF) = 2.416, CFI = .973, GFI = .978, TLI = .952$,
NFI = .955 and RMSEA = .062. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant associate among CS and CI (β = .536; p < .000). CS was significantly correlated with self-reported CL (R² = .31; p < .000).

### 4.5.8. Customer Commitment and Customer Loyalty

H8 stated as there is a significant influence of Customer commitment on Customer Loyalty. Results of SEM described that CC was strongly connected with CL. This model presented good fit χ² = 18.286, DF = 8, P < .000, (χ²/DF) = 2.286, CFI = .976, GFI = .983, TLI = .954, NFI = .958and RMSEA = .059. Likewise, additional validation of tolerability of that classical was concluded limit approximates standards that confined consistent regression coefficient and P value. The homogeneous path coefficient disclosed a significant association between Customer Commitment on Customer Loyalty (β = .641; p < .000). CC was significantly correlated with self-reported CL (R² = .27; p < .000).

#### Table 4: Summary of research Hypothesis Results

<table>
<thead>
<tr>
<th>H</th>
<th>Relationship</th>
<th>(β)</th>
<th>t-Value</th>
<th>Sig.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>SQ → CC</td>
<td>.501</td>
<td>7.324</td>
<td>***</td>
<td>.25</td>
</tr>
<tr>
<td>H2</td>
<td>SQ → CS</td>
<td>.637</td>
<td>10.123</td>
<td>***</td>
<td>.21</td>
</tr>
<tr>
<td>H3</td>
<td>SI → CC</td>
<td>.455</td>
<td>9.36</td>
<td>***</td>
<td>.57</td>
</tr>
<tr>
<td>H4</td>
<td>SI → CS</td>
<td>.759</td>
<td>10.323</td>
<td>***</td>
<td>.42</td>
</tr>
<tr>
<td>H5</td>
<td>MO → CC</td>
<td>.872</td>
<td>9.422</td>
<td>***</td>
<td>.76</td>
</tr>
<tr>
<td>H6</td>
<td>MO → CS</td>
<td>.475</td>
<td>7.386</td>
<td>***</td>
<td>.59</td>
</tr>
<tr>
<td>H7</td>
<td>CC → CL</td>
<td>.536</td>
<td>12.472</td>
<td>***</td>
<td>.31</td>
</tr>
<tr>
<td>H8</td>
<td>CS → CL</td>
<td>.641</td>
<td>19.128</td>
<td>***</td>
<td>.27</td>
</tr>
</tbody>
</table>

### 5. Discussions

The current study examines and then certifies the framework consisting of service innovation and service quality market orientation as independent, customer satisfaction and customer commitment as mediating, and customer loyalty as dependent. This section explains the development of new reasoning strategies. This section contains the responses to the research objectives and research questions. The present study collects and separates data at the cross-sectional level. The investigation rescued 369 survey questions for cross-sectional data, which were utterly identical responses from the same respondent. Finally, study limitations are supposed to attempt to comprehend the current study findings.

SEM analysis showed that service quality strongly benefits customer commitment, confirmed by earlier research (Hazra & Srivastava, 2009). Hence H1 is accepted. The findings of the SEM investigation revealed that service quality had good and substantial effects on customer satisfaction and was supported by earlier studies like Khair, Tirtayasa, and Yusron (2023); Viddy, Srielaningsih, and Asrifan (2023), who discovered that SQ strongly and effectively influences CS. Hence, H2 is accepted. The findings of the SEM investigation revealed that service innovation had good and considerable influence on customer commitment and was supported by earlier studies like Yeh, Chen, and Chen (2019), who discovered that SI strongly and effectively impacts CC. Hence, H3 is accepted. Results revealed that service innovation was strongly linked with customer satisfaction. Previous outcomes of the study of Yu, Yen, Barnes, and Huang (2019) Sigit Parawansa (2018) support the results of our study that SI has an impact on CS. Hence, H4 is accepted. Findings confirmed that market orientation was significantly linked with customer commitment. Previous outcomes of the study of Carlos Pinho, Paula Rodrigues, and Dibb (2014); Yu et al. (2019) support the results of our study that MO has an impact on CC. Hence, H4 is accepted. Hence, H5 is accepted. SEM results showed market orientation was positively significant associated with customer satisfaction. Previous outcomes of the study of Jyoti and Sharma (2012); Guo and Wang (2015) support the results of our study that MO has an impact on CS. Hence, H6 is accepted. SEM results showed customer commitment was positively significant associated with customer loyalty. Previous outcomes of the study of Khraiwish, Al-Gasawneh, Joudeh, Nusairat, and Alabdi (2022); Liang (2022) support the results of our study that CC has an impact on CL. Hence, H7 is accepted. SEM results showed customer satisfaction was positively significant associated with customer loyalty. Previous outcomes of the study of Akil and Ungan (2022); Saraswati (2022) support the results of our study that CS has an impact on CL. Hence, H8 is accepted.
6. Conclusion
To summarize, the current study has advanced empirical knowledge of the significant impact of proposed exogenous on endogenous connections in the domain of electronic purchases in Pakistan. Earlier studies back up this supporting evidence from the current study. This investigation has some theoretical benefits. First, the research findings indicate significant positive impacts on the framework, and this is a new theory change in this framework. Second, the framework's factors are analyzed in various programs such as SPSS and AMOS 23, and the researchers verify various aspects that make their study unique. This will significantly improve literacy. Practitioners and managers employ this to conquer theoretical problems. Third, professionals use this study to expand their mental understanding and think differently than in the past. This investigation has some managerial benefits. Service innovation has a helpful inspiration on CL and CS. This result displays that the innovation in the service process is good for the brand. Managers think about new ideas related to innovation in the service. Managers check the overall market scenario, pay attention to competitors' activities and innovations, and make the strategy for service innovation. With the help of service innovation, the manager makes their customers loyal, and this activity creates satisfaction in the mind of customers related to new modern time ideas. Market orientation affected this. Managers critically analyze the market, check where the market goes to innovation, and make strategies to cover the gap in the market. MO is the direction of the overall market related to services and if the manager achieves this, the manager will increase the customer. Because customers are satisfied and committed because of innovation and quality. CS significantly impacts CL; these outcomes suggest that the manager will be loyal if the customer is satisfied. Loyal customer increases the overall production of the product and raises the profit of the brand. Managers make strategies to make the customer satisfied to gain profit. Customer commitment has a favorable effect on CL, these outcomes show that if the customer is committed, he will always purchase from this brand. Managers make strategies to make customers committed and gain profit.

6.1. Limitations and Future Research Directions
The current study was conducted cross-sectional, with data collected at a single point in time and a sample of 369 people. As a result, future research should be conducted more comprehensively to evaluate and confirm the hypothesized relationships over a more extended period. Second, the majority of the study results are based on online shopping. As a result, extrapolating the findings to other service sectors takes a lot of work. As a result, future investigations in various Pakistani service industries, such as banks, financial institutes, hotels, entertainment, education, and insurance, might be conducted to validate the study findings. The third criticism is that the present investigation acquired data through self-reported questionnaires, which could lead to a typical technique bias issue. Future researchers can look at qualitative or mixed-method approaches that can help them assess from many perspectives. Nonetheless, because the research study was carried out in Pakistan (an emerging market), the results are predicted to be applied in other developing countries to promote customer loyalty in online shopping.

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