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# Promoting Customer Loyalty and Satisfaction in Financial Institutions through Technology Integration: The Roles of Service Quality, Awareness, and Perceptions

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Abstract: This study examines the effects of quality of service, product awareness, and perceptions among customers of Islamic financial institutions (IFIs) on customer loyalty through technology integration using customer satisfaction as a mediator. A well-structured, comprehensive questionnaire was developed and data were collected from 203 respondents who were customers of six IFIs in Pakistan and had at least 2 years of experience in dealing confiorm this is correct with these IFIs. A total of 171 accurate responses were received from the respondents. Ten hypotheses were developed and statistically verified using regression and correlation analytical techniques. The results reveal that the quality of customer services and awareness of IFIs had a direct and positive relationship with customer loyalty, which in turn was mediated by customer satisfaction. Perceptions about IFIs had a direct positive relation with customer satisfaction. However, the relation of perceptions and quality of service with customer loyalty and satisfaction in financial institutions through technology integration was found to be insignificant, even in the presence of customer satisfaction as a mediator.

**Keywords:** quality of service; customer perceptions; customer satisfaction; Islamic financial institutions (IFIs); IFIs' performance



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## 1. Introduction

The Islamic financial industry is one of the fastest-growing industries in the world. To date, this industry has mainly focused on Muslim countries [1]. Although the Islamic financial industry has a high growth rate, there is a considerable margin for improvement, as it has greater potential than what is reflected by its current state. The word "Islamic" should not be a limitation for this industry [2]. Accordingly, it should not be limited to Islamic countries or countries with a Muslim majority population [1]. Instead, this industry should preferably spread all over the world [3,4]. The potential of this industry is evident due to its superior performance in the era of great financial depressions, such as that of 2007–2008 [5–7]. The existing evidence of good performance provides a sound base for the Islamic finance industry to be recognized as a global industry. For these transitions and global acceptance, this industry needs to address its current issues. Some key issues hindering its global transformation include the quality of service, customer satisfaction, awareness, and global perceptions, which need attention from all key stakeholders [8]. Therefore, considerable work is required to explore the true potential of this industry and move towards globalization.

An Islamic financial institution (IFI) is defined as a banking or financial system that is based on the principles of Islam or Sharia Law and is guided by Islamic rules of economics [9–11]. These IFIs include banks, welfare institutions, and other lending institutions

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whose business models are based on Islamic principles [4,10]. In the current study, the terms financial institution and financial technologies refer to Islamic banks, technologies, welfare institutions, and lending institutions that provide finances to their customers. Previously, several attempts have been made to study the quality of service of IFIs [12], awareness about IFIs' services and products [13,14], and general perceptions of these IFIs [15,16]. However, the combined effects of these key variables on customer loyalty to IFIs have not been explored to date. Moreover, advanced technologies in banking and the ways in which Islamic banking can be integrated into financial technologies have not been explored yet, thereby leaving gaps in the ways that IFIs can be made sustainable in the long run. These variables and their effects must be explored if the customers and the clients are to enjoy the holistic essence of such financial endeavors. Therefore, this study is an attempt to examine the combined effects of perceptions, awareness, and quality of service on customer satisfaction with IFIs, which ultimately leads to increased loyalty.

Service quality is a measure of the variation between the services provided to customers and their expectations. The quality of customer services is a critical evaluation of an institution's performance in the service industry [5,17,18]. The quality of service is more important than the marketing mix of the service [19]. It relates to enhanced customer satisfaction, which leads to better financial performance [7,17,20]. Firms providing the top service quality have great advantages over their competitors and are reported to make more profits than their industrial counterparts [21–23].

Creating awareness about its products and services distinguishes a firm from its competitors [13]. The types, reliability, and variety of products and services provided by a firm have a great influence on maintaining long-term relationships with its customers based on the concept of mutualism [24]. Thus, the firm enjoys more customers and sales, whereas the customers, in return, get a variety of products and services from a single source. Such setups promote brand awareness and induce loyalty in customers [25]. Brand awareness is the power of the existence of a brand in a customer's mind [26]. It helps customers to be aware of the products and services of a firm. The decision-making process involved in buying or opting into a service depends on brand knowledge and the customer's perception of how easy it would be for them to use a product or service [27,28]. This leads to enhanced customer preferences and increased loyalty to the firm, thus providing a competitive advantage for the firm in the market [1,27,29,30]. Accordingly, if there is a lack of awareness about the products and services of a firm, attracting and maintaining customers will become very tough, and vice versa. In today's world, the relations between different variables concerning customer satisfaction and brand success are also highly dependent on the sustainability of the product or service being provided. The integration of technology by brands is an important determining factor when analyzing the possibility of success that a product or brand can enjoy. The same can be applied to banking approaches as the world moves forward with online banking across the globe [31]. The technological advances in IFIs are thus a crucial factor in determining the long-term outcomes of Islamic banking and the levels of customer satisfaction associated with it.

This study explores the concepts of product awareness, customer loyalty, customer satisfaction, and industry performance. The existing literature has gaps in the exploration of Islamic financial banking, and its integration with technology to make it a sustainable and future-proof method of financial management for customers. The following sections will explore the ways in which customer expectations can be analyzed to predict how the IFIs can be integrated into the modern financial world. The hypotheses for this study are all divided into separate variables to explore and identify how different business and marketing concepts are interrelated. An explorative study was carried out using a questionnaire-based approach for data collection. The paper is divided into several sections, which include a literature review, methodology, results and discussion, and conclusion.

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#### 2. Literature Review

# 2.1. Customer Satisfaction Theory and Banking in Pakistan

As per the expectancy value theory, customers' perception of a brand is extremely important for attracting and maintaining sales, which in turn leads to a product's success. The levels of customer satisfaction can directly impact their loyalty to a brand and product. This theory helps establish the grounds for the current study, which aims to explore the correlation between customer perception, loyalty and satisfaction. In light of the customer loyalty and value perception theories, brand image is an intangible asset that helps a firm achieve higher and more sustainable performance [5,31,32]. A negative or bad brand image leads to failure of products and services mainly due to the development of bad perceptions and associated negative publicity [33,34]. Like other financial institutions, IFIs have their fair share of failures and shortcomings. At present, these failures induce a relatively negative public perception. The association and limitation of IFIs' operations to Muslim countries are directly linked to such failures. IFIs and Islamic banking technologies operate similarly to conventional banks; they enjoy the benefit of attracting a certain group of customers due to the association of the word "Islam" [3,35,36]. However, in the era of globalization and modernization, this is not enough and these institutions need to introduce worldwide competitive aspects and technology integration for attaining global outreach and developing sustainable approaches [37]. Financial institutions around the world are spreading their branches and targeting global outreach. In this regard, IFIs need to increase the knowledge among its customers about their product and services and improve their marketing strategies to change customer perceptions [38]. Similarly, the marketing should not be limited to Muslim countries exclusively, rather a more globalized approach is required. Misperceptions about products and services of a firm create negativity among its potential customers that ultimately affects their loyalty to that firm [39-41]. These misperceptions are not limited to the association with a religious group but also include a lack of brand marketing, awareness and a lack of variety of services [42–44]. Thus, to be globally competitive, IFIs need to tackle misperceptions by improving awareness, brand marketing, and improving the quality of service [23]. These attributes, if attained, will get the required attention of customers, induce customer satisfaction, and heal the deteriorating performance of IFIs [7]. This will help IFIs have a more sustainable and global business outreach and customers [45].

Another key aspect of financial institutions and financial technologies is that of customer satisfaction. This aspect has been widely discussed in marketing research [46–48]. An unsatisfied customer breeds negative rumors that devastate the spirit of honesty and loyalty, which in turn leads to the downfall of the institution [49]. Unsatisfied customers influence people in their close circle to avoid the product. They also create a chain of negative emotions, unwanted influences, and hatred for the product [50]. Thus, the products and institutions lose their integrity and reliability. Accordingly, these institutions are forced into financial crises due to diminished product sales and service utilization. On the other hand, a fully satisfied customer not only remains loyal but also spreads positive word about the brand that helps attract new customers [51-53]. In either case, a chain of fission reactions starts, be it negative or positive, putting the reputation of the institution at stake. Thus, the reputation and integrity of the institution can be enhanced or reduced based on customer interactions. This can possibly lead to either more or less customer satisfaction, loyalty, and attraction [54]. Further, with escalating globalization, attracting potential customers is as vital as retaining existing customers [33,53–55]. Retaining existing customers is much cheaper than acquiring new customers. According to Pfeifer [56], acquiring new customers is five times more costly than retaining existing customers. Therefore, specific attention should be paid to retaining existing customers. Having a channel for feedback and ensuring that the customer's voice is heard by the management are some useful strategies in this context. The use of technology in financial institutions to enhance services and provide ease of online banking is also a crucial aspect that could be integrated widely in IFI to ensure that the customer experience can be enhanced [55]. Additionally, customer loyalty is the

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key to gaining higher profitability and attaining competitive advantage [1,57–59]. Loyal customers add value to the institution in terms of sales and service usage. They also help in attracting more customers due to positivity and trust because of good word of mouth [60]. IFIs need to focus on these aspects if they are to transform into global institutions and evolve from their current state.

Pakistan is a growing economy and many of the financial systems are in their nascency [61–64]. In the case of Pakistan, financial agreements such as public–private partnerships and the associated funding agencies including IFIs are growing and attracting new customers [54,65]. Relevant to the financial institutions, studies such as Naveed et al. [66] discuss the effects of innovation on customer satisfaction and brand loyalty in Faisalabad, Pakistan. The authors based their study on 85 university students and highlight a significant relation between innovation, customer satisfaction, and loyalty, especially among younger customers. Similarly, for the IFIs, Akhtar et al. [67] compared the conventional and Islamic institutions in Pakistan in terms of their liquidity risk assessment. The authors argue that a positive but insignificant relationship exists between the size of an IFI, its working capital, and its net assets. Additionally, at the 10% significance level, the relationship between capital adequacy ratios in conventional banks and return on assets in IFIs was found to be positive and significant. Relevant to the current study, the state of customer satisfaction and service quality was explored by Muhammad Awan et al. [68] for Pakistani IFIs. The study listed the top five service quality factors, which were employee service criteria, empathy, customer focus, service architecture, and convenience service encounter. Additionally, they highlighted five customer satisfaction dimensions: competency, responsiveness, competitive services, safe transaction, and industry knowledge. These useful studies have explored the context of customer satisfaction in terms of IFIs in Pakistan. However, the overarching effects of quality of service, customer perception and customer loyalty in the context of customer satisfaction have not been explored to date for Pakistani IFIs. This gap is targeted in the current study.

The Islamic financial industry, though one of the fastest growing industries in the world, is yet to mature and unlock its true potential. The IFIs have been assessed and thoroughly discussed across different variables, but the key area of customer loyalty is less explored. Customer loyalty is assessed using three key variables: quality of service, perception, and awareness of services and products. Based on an extensive literature review, this study proposes and subsequently explores 10 hypotheses related to the three key assessment variables and their relation to the customer loyalty of IFIs. This study attempts to examine these key variables for IFIs to help them maintain their customer loyalty in order to attract and retain more customers. The core objective is to explore whether addressing these key variables increases the customers' loyalty or vice versa. This study aims to address the gaps in literature pertaining to the global outreach of IFIs and ways in which Islamic banking and financial technology solutions can attract leaders, decision makers, and practitioners to investigate the core issue of customer loyalty.

## 2.2. Quality of Services and Customers Satisfaction

Service quality and customer satisfaction go hand in hand and play an important role in the success of an organization [17,69]. Customers show cooperation and build good relationship with service providers if they are satisfied from the quality of service provided to them and vice versa [70–73]. Provision of good services ensure better relationships with the customers, leading to more loyalty and trust [25,74–76]. Excellent quality customer service promotes customer satisfaction that strengthens the positive relationship between key stakeholders and customers [24,77]. Osman et al. [62] provided concrete evidence of the mutualistic relationship between service excellence and customer satisfaction. The relationship between these key variables has been explored all over the world by different researchers. Accordingly, it has been established that there is a positive and direct relationship between quality of service and customer satisfaction [78–80]. Based on these useful studies, the first hypothesis of the current study is formulated as shown below:

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**Hypothesis 1.** Quality of service has a direct and positive relationship with the customer satisfaction of IFIs.

Customer loyalty is the desire to repurchase a product or reuse a service by the existing customers of a firm. The survival of a firm depends on the continuous usage of its products and services by its customers [81]. It is much better and cheaper to retain existing customers [82–84] because it costs five times more to acquire new customers [85]. This provides an incentive to firms to retain their customers by providing high quality services [86]. By improving service quality, a firm can improve customer loyalty [87]. Many past studies have reported a positive and direct relationship between quality of service and customer loyalty [60,88–91]. Thus, it can be safely assumed, based on the mentioned studies, that customer loyalty of the IFIs can be enhanced by increasing service quality. This led to the formulation of the 2nd hypothesis as shown below:

**Hypothesis 2.** *Quality of services has a direct and positive relationship with the customer loyalty of IFIs.* 

## 2.3. Product Awareness and Customer Loyalty

Awareness is a key contributor to ensuring the success of any product or service. No matter how good the products and services of a company are, it will remain unsuccessful unless it creates awareness about those products among target customers [92]. With increased brand awareness, more customers are attracted and satisfied, which fuels more positive public perception and elevated brand image [15,93]. Product awareness and customer satisfaction are positively related to one another [13,94,95]. To gain a competitive advantage in the globalized world, a firm must distinguish itself from others. This can be achieved through increased awareness about its products and services leading to enhanced customer satisfaction [21,96–98]. Based on the above arguments, the 3rd hypothesis of the current study is formulated as shown below:

**Hypothesis 3.** Product awareness has a positive and direct effect on the customer satisfaction of IFIs.

The type, quality and variety of products and services offered by an organization to its customers have a great impact on maintaining a long term mutualistic relationship [22]. Ross [49] described product awareness as the presence of a product in the mind of the customers of a firm for a considerable amount of time. The higher the awareness of products and services, the higher the customer loyalty to the firm will be [13,25,99,100]. As a result, it gives a competitive advantage to the firm over its competitors [51]. Without awareness, loyalty becomes nearly impossible. The customers will not be aware of the potential benefits and fruits of the product and will not be inclined to make a buying decision [14,77]. As a result, the customers are unable to recall a product or service when making purchase decisions when there is little or no product awareness [54,65]. This helped in formulating the 4th hypothesis of the current study as shown below:

**Hypothesis 4.** Product awareness has a positive and direct effect on the customer loyalty of IFIs.

# 2.4. Perception and Customer Satisfaction

Customer perception dictates the success of the products and services of an organization. Good perception is an intangible asset of an organization that helps it achieve its objectives [89]. Customer satisfaction is empowered by perceptions about the products and services offered to them [15]. If customers get more value than their perceptions, they become more satisfied as highlighted by Hussain [65] and Shome et al. [12]. Such products and services are taken as delighters by the customers and the loyalty is boosted. Many studies have discovered a positive relationship between these customers' perceptions and

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their satisfaction [59,82]. Based on these relevant studies and arguments, the 5th hypothesis of this study is formulated as shown below:

**Hypothesis 5.** Customers' perceptions have a direct and positive relationship with their satisfaction with IFIs.

The values offered by a firm elevate its customer satisfaction. If the customers feel valued by the firm, they provide positive feedback about the products and services and remain loyal to the firm. Such perceptions increase the assessments and sales of products and services of the firm, resulting in increased customer loyalty [73]. On the other hand, misperceptions affect the value offered and promotes negative assessments of the firm that negatively affect customer loyalty. Studies like Arbore and Busacca [35] and Bhattacharya and Sen [37] have shown a positive relationship between the firm's public perception and customer loyalty. In light of these arguments, the 6th hypothesis of the current study is formulated as shown below:

**Hypothesis 6.** Customer perceptions have a positive and direct effect on customer loyalty to IFIs.

## 2.5. Loyalty and Customer Satisfaction

The relation between customer satisfaction and loyalty is a widely researched topic. Satisfied customers act as marketing agents for products that attract more customers. On the other hand, negative word is spread by unsatisfied customers that harms loyalty to the firm [86]. According to Faed et al. [30], approximately 90% of customers remain loyal to the firm if their needs are met appropriately and in an efficient way whereby they feel valued. When the expectations of customers are met in an effective manner, they remain attached to the organization and provide the required positive feedback for necessary improvements [86]. This establishes the desired feedback loop, which adds to the overall value of an organization and its continuous improvement. Based on trust and a good relationship with the firm, a customer develops an emotional attachment with it in the form of loyalty [87]. This positive emotional relationship of customer satisfaction and customer loyalty is supported by many useful studies [46,67]. Thus, the 7th hypothesis of the current study was developed based on the above studies and arguments, as shown below:

**Hypothesis 7.** Customer satisfaction has a positive and direct relationship with the customer loyalty of IFIs.

# 2.6. Mediating Role of Customer Satisfaction

Quality of service has a positive relationship with customer loyalty that is mediated by customer satisfaction [76]. A satisfied customer spreads positive word of mouth about the relevant organization and remains loyal to it [43]. An organization can keep its customers satisfied by providing them with high quality services [61,77]. High quality services promote customer loyalty to the organization [88]. Moreover, high quality services induce higher rates of customer loyalty and increased satisfaction [24]. Based upon these arguments, the 8th hypothesis of the current study is deduced as shown below:

**Hypothesis 8.** Customer satisfaction mediates the relationship between quality of service and customer loyalty to IFIs.

Proper marketing and corresponding product awareness dictate the buying decisions of a customer [26]. If the customers are not aware of or satisfied with a service or product, they find it difficult to recall it during their buying decision [89]. Accordingly, increasing the awareness of products and services among customers induces greater satisfaction. This in turn makes the customers more loyal to the firm. Such satisfied customers remember the firm in their purchase or service use decisions [74]. Thus, customer satisfaction plays

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a mediating role in the relationship between product awareness and customer loyalty. Hussain [65] reported that customer satisfaction mediates the relationship between product awareness and loyalty. Thus, the 9th hypothesis of this study is formulated as given below:

**Hypothesis 9.** Customer satisfaction mediates the relationship between the product awareness and customer loyalty of IFIs.

Customer perception has a mutualistic relationship with their satisfaction that enhances their loyalty [15]. Carrillat et al. [71] reported a positive relationship between perceptions, customer satisfaction, and customer loyalty. However, the mediating role of customer satisfaction on the relationship between perceptions and customer loyalty is relatively less explored. A firm giving value to its customers induces a positive perception that enhances their customer satisfaction and imparts loyalty [55]. The same has been argued by Fatima et al. [59]. Further, satisfied customers tend to develop emotional bonds with the firm that reinforces the relation and loyalty [14,87]. Based upon these arguments, the last hypothesis of current study is formulated as shown below:

**Hypothesis 10.** Customer satisfaction mediates the relationship between perceptions and customer loyalty of IFIs.

# 3. Research Methodology

The thrust of this study is to investigate the affect of service quality, product awareness, and public perception on customer loyalty while keeping customer satisfaction as a mediating variable. The study uses both qualitative and quantitative approaches. The qualitative variables highlighted from the relevant literature are used in this study. A total of 10 hypotheses have been developed based upon an extensive literature review that are statistically tested and verified to yield reliable results. The data were collected using both in-person and online data collection tools and techniques. Online administrative questionnaires were floated in 10 major cities of Pakistan to get a true representative sample. A comprehensive was designed according to the variables and proposed hypotheses of the study. The conceptual model of this study is shown in Figure 1.

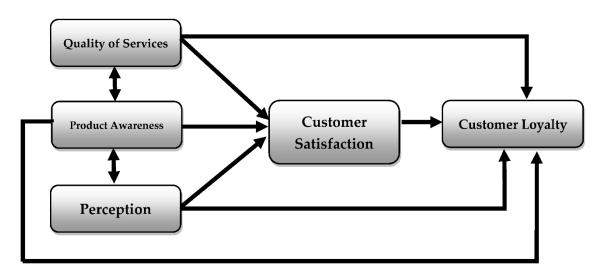


Figure 1. Interactions between quality of service, product awareness, perceptions, customer satisfaction, and loyalty.

Figure 1 shows the relationship between the three key assessment variables and customer satisfaction and loyalty. It can be observed that these variables are related on both fronts: intra dependencies and interdependencies. Thus, increasing each of these variables will not only enhance the other variables but also add value to customer satisfaction and

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loyalty. The data for variables under investigation was statistically analyzed using SPSS and the results are drawn accordingly.

The questionnaire used to collect data consists of two core sections. The first section is related to the respondents' information and demographics. The second portion consists of Liker-scale-based questions that investigated the proposed hypotheses. All questions were asked in English. Accordingly, it was ensured that all respondents had an education of at least a bachelors' degree or above in order to be able to respond properly to the questions.

## 3.1. Population and Sampling

The study was conducted in 10 major cities in Pakistan. It uses a broad range of population to enhance the scope of the study and get a reliable and representative sample based on the responses of customers of six IFIs in Pakistan. A total of 11 major financial institutions exist in Pakistan, of whom six agreed to provide data for the current study. These IFIs have their branches in all four provinces of Pakistan and are therefore classified as major financial institutions. These institutions consist of banks, welfare, and lending institutions. Among the six IFIs, a total of four banks and two welfare and lending associations are included in this study.

A random systematic sampling technique is used to select the sample based upon its core logic of giving equal opportunity to every individual in the sample. Thus, a total of 400 (300 online and 100 self-administered) questionnaires were distributed to respondents across 10 major cities in Pakistan. These include Islamabad, Rawalpindi, Chakwal, Multan, Gujranwala, Lahore, Faisalabad, Karachi, Quetta, and Peshawar. Most of these cities are provincial or regional capitals and have a minimum population of 1.5 million to meet the inclusion criteria. Although other cities may exist with a population more than 1.5 million, these were not considered because they were not the regional or provincial capitals. Additional reasons for not considering them included the lack of easy access and complicated travel arrangements for these cities. Table 1 shows the population details of the surveyed cities and the method of data collection.

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City	Population (Million)	Method of Data Collection
Karachi	21.2	Online
Lahore	11.13	Online
Islamabad	2.01	In person
Faisalabad	7.87	Online
Gujranwala	5.01	Online
Rawalpindi	5.41	In person
Peshawar	4.27	Online
Multan	4.75	Online
Chakwal	1.50	In person
Quetta	2.28	Online

Note: The population is based on the data collected by the Pakistan Bureau of Statistics, Block Wise Provisional Summary Results of 6th Population & Housing Census—2017. (http://www.pbscensus.gov.pk/content/block-wise-provisional-summary-results-6th-population-housing-census-2017-january-03-2018 (accessed on 3 February 2019)).

Among the mentioned cities, online respondents belonged to Lahore, Karachi, Multan, Faisalabad, Quetta, Peshawar, and Gujranwala. The self-contacted respondents were from three cities of Pakistan, including Islamabad, Rawalpindi, and Chakwal. Not all respondents could be contacted due to access, resource constraints, and time availability. Out of the 400, a total of 203 respondents consented to participate in the survey. Hence, the collected sample size is 203. Out of these 203 respondents, 171 were rendered useful and usable. These are utilized to analyze the collected data while the rest were rejected due to incompleteness or repetitions of a single selected choice. Thus, the reliable response rate of the questionnaire survey is 171/400 (42.75%). The sample size of Dillman [90] is used as

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the basis for data collection, who highlights that a total of 96 responses are required to be a true representative of population of 100,000,000 with a 10% sampling error and 50/50 split.

Since none of the surveyed cities had a population more than the stated limit, the results are expected to be a true representation of the population. The same level of significance was used by Akhtar et al. 2011 in their study on financial institutions in Pakistan. All the respondents were existing customers of the IFIs in Pakistan. These respondents had at least 2 years of experience dealing with IFIs. The respondents' lists were obtained from six IFIs in Pakistan. We ensured that we only contacted customers who had previously consented to be contacted by IFIs regarding study-related queries. After explaining our data secrecy policies to these financial institutions, the authors were granted access to the email addresses of the respondents. These respondents were then contacted accordingly for data collection.

After collecting the responses, statistical tools were used to analyze the results. SPSS was used to perform descriptive statistic, reliability, correlation, and regression analysis of the collected data. Descriptive statistics were used to check the mean and standard deviation of the demographics and variables of the study. A reliability test was performed to check the existence of relationships on scaled variables of study. Correlation techniques were used to test the magnitude and strength of the identified relationship between variables. Linear regression analysis was used to test the changes in customer loyalty caused by each of the independent variables.

# 3.2. Measurement Scales and Sections of the Questionnaire

A five-point Likert scale was used for data collection where "1" refers to strongly disagree and "5" to strongly agree. The questions were adopted from similar research in the area under consideration. Further, four or more questions were asked to assess each variable. Various sections of the questionnaire were introduced with different headings.

# 3.2.1. Quality of Services

The quality of service was assessed through five inquiring statements such as "The IFI delivers the service exactly as promised". It was adopted from the study of Jayawardhena [91] with slight modifications to suit the current study's needs. The statements were provided in the questionnaire. The Cronbach's  $\alpha$  reliability of the scale is 0.853, showing that the data are around 85% reliable for drawing valuable results.

#### 3.2.2. Product Awareness

As mentioned before, a total of five questions were asked to assess the awareness of customers. Questions such as "I can recall some products and Services of IFIs" were asked to assess their awareness levels. The methodology of Washburn and Plank [5] was adopted for this section with small amendments to make it suitable for the current study. The Cronbach's  $\alpha$  reliability was 0.729, representing around 73% reliability for further assessment.

## 3.2.3. Perceptions

This section consists of a total of 10 questions such as "IFIs' products and services are similar to the products and services of conventional banks, except with the use of different names". The scale for perception related questions was adopted from study of Hassan et al. [34] with slight modifications. The Cronbach's  $\alpha$  reliability of this section was calculated to be 0.741, representing around 74% reliability.

# 3.2.4. Customer Satisfaction

For the quantification of customer satisfaction, a section with nine core questions was included in the questionnaire. An example question is "IFIs have met my expectations". The idea was adopted from Terpstra et al. [67] with minor changes. The Cronbach's  $\alpha$  reliability of the scale was 0.71, giving 71% reliability.

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## 3.2.5. Customer Loyalty

The last section of the questionnaire was aimed at assessing customer loyalty. A total of four questions were included in this section. An example questions is "I prefer IFIs above others". These modified questions are adopted from the study of Kassim and Asiah Abdullah [93]. The Cronbach's  $\alpha$  reliability of the scale is calculated as 0.834, representing around 83% reliability for further assessment and deduction of consistent results.

In addition to the above, an open-ended discussion question was also included in the questionnaire. The question was optional for the respondents. Their views are sought regarding their satisfaction and loyalty criteria in accordance with the variables under investigation. A total of 47 respondents replied to this section, stating various variables or their combination to improve their satisfaction levels with and loyalty to their IFI.

#### 4. Results and Discussions

Based upon our detailed and systematic methodology, useful results are deduced. In terms of the demographics, the majority of the respondents were male. They constituted 81 percent of the 171 respondents. Women represented 29 percent. The underlying reason for lower female representation is that in Pakistan the number of working females is lower compared to males. The survey was mainly targeted at middle-aged people because of their stable incomes, higher education, and more willingness to participate. Accordingly, the age of most of the respondents was between 25 to 35 years. Young people are usually more willing to participate in surveys and more well versed on Islamic banking since it is not an ancient concept in the banking sector. The same was also pointed out by Naveed et al. (2012) in their study. According to the authors, young people are more attracted towards innovative products that provide flexibility of use between media sources such as mobile phones and tablets.

The religion of respondents is another important demographic aspect as IFIs mostly focus on Muslim customers. Accordingly, the current survey is aimed at areas with Muslim majorities. Thus, in total, 169 Muslim and 2 non-Muslim respondents were included in the questionnaire survey. Education is another useful assessment factor for such surveys. It is usually perceived that educated people are more versed and willing to participate in such surveys. Therefore, most of the respondents in this survey have a graduate or master's degree and constitute 92 percent of the total respondents. The remaining 8 percent had professional diplomas or equivalent education. The majority of the respondents were professionals working at various management-related positions in organizations. The income level of respondents ranged from 50,000 PKR (300 USD) to 200,000 PKR (1120 USD) per month.

Table 2 presents descriptive statistics, correlations, and reliability between the variables. All correlations are found to be significant at p0.01. The mean for quality of service was calculated as 1.67. For customer satisfaction and customer loyalty, the means were 2.03 and 2.06, respectively. The correlation between the quality of service and customer satisfaction is found to be 0.44, which is very significant. These results are consistent with the findings of Fatima et al. [59], who modelled satisfaction factors for customers in a developing country in terms of marketing. This also points to the fact that regardless of the industry, quality of service is always vital to customer satisfaction. The results strengthen the hypothesis of positive correlation between customer satisfaction and service quality. The quality of service and customer loyalty have a significant correlation of 0.44, which is in accordance with the results of Hassan et al. [34]. Similarly, the mean for product awareness was found to be 2.09, which has a significant correlation of 0.47 and 0.52 with customer satisfaction and customer loyalty, respectively. These results are in accordance with Sweeney and Swait [87]. Thus, the hypothesis of increased product awareness increasing customer satisfaction and loyalty is accepted.

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Variable	Mean	S.D	1	2	3	4	5
Gender	1.19	0.39					
Age	2.36	0.73					
Religion	1.01	0.11					
Education Level	4.61	0.67					
Occupation	2.40	0.86					
Monthly Income	2.09	0.91					
Quality of Services	1.67	0.55	(0.81)				
Product Awareness	2.09	0.75	0.34 **	(0.86)			

**Table 2.** Mean, standard deviation, correlations, and reliabilities.

1.96

2.03

2.06

Perceptions

**Customer Satisfaction** 

Customer Loyalty

Note: \*\* Correlation is significant at the 0.01 level (two-tailed). Cronbach's reliability is presented in parentheses.

0.61

0.59

0.71

0.42 \*\*

0.44 \*\*

0.44 \*\*

0.31 \*\*

0.47 \*\*

0.52 \*\*

(0.89)

0.64 \*\*

0.36 \*\*

(0.86)

0.47 \*\*

(0.76)

Perceptions have a mean of 1.96 and a significant correlation with customer satisfaction and loyalty: 0.64 and 0.36, respectively. These results are consistent with those of Bayraktar et al. [82] and Faed et al. [58]. Further, customer satisfaction was found to have a positive and significant correlation with customer loyalty with a magnitude of 0.47. This positive relation has previously been highlighted by Hussain et al. [65] in their study

These results show provisional support for the hypotheses of this study. Further, it points to the relevancy and applicability of the relevant literature as discussed in the literature review. None of the correlations for any of the variables were found to be insignificant, which augments the authenticity of the research for further in-depth analysis and deduction of reliable results. Customer loyalty and customer satisfaction were found to be linked with the understanding of IFIs, the quality of service provided, and the product information provided to them. The relations between these factors stand true as per the hypothesis of the study. The responses gathered to test the hypotheses have yielded results that all point towards the presence of a positive correlation between product understanding, customer service, and customer loyalty. These findings are also in line with the general sales and business norms, where a product is only popular among customers if they have an understanding of how the product serves them. Similarly, brand loyalty among customers is dependent on the quality of products and services provided to the customers.

After calculating the correlation between the variables, regression analysis is conducted. Table 3 shows the regression results of the current study with R2 and  $\Delta$  R2 values of 0.38 and 0.16, respectively. These values are significant at p < 0.001, indicating the significance of these results. The quality of services when regressed with customer satisfaction and customer loyalty give  $\beta$  values of 0.15 and 0.32 that are significant at p < 0.05 and p < 0.001, respectively. Product awareness is found to exhibit a significant relationship (p < 0.001) with customer satisfaction and quality of service (0.21 and 0.38, respectively). The only anomaly observed is in the case of perception, which had an insignificant relationship with customer loyalty at p < 0.10. The corresponding  $\beta$  value is 0.15, which shows its insignificance. This insignificance points to the behavioral tendencies of people at various localities as highlighted by Yang and Peterson [94]. The authors argue that people at different geographical locations perceive satisfaction differently and behave in a unique manner, thus an insignificance can exist. Since the current study is carried out in a developing country with fewer brands, loyalty can be misleading in this case. However, in contrast, a significant relationship was observed between perception and customer satisfaction, with a β value of 0.48. Lastly, a strong relationship was found between customer satisfaction and loyalty with a  $\beta$  value of 0.57 at p < 0.001.

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**Table 3.** Results of the regression analysis.

D 11.	Customer Satisfaction			<b>Customer Loyalty</b>			
Predictor	β	$R^2$	$\Delta R^2$	β	$R^2$	$\Delta R^2$	
Step 1:							
Quality of Service	0.15 *			0.32 **			
Product Awareness	0.21 **			0.38 **			
Perceptions	0.48 **			0.15			
Step2:							
Customer Satisfaction				0.57 **	0.22	0.22 **	
Step3:							
Quality of services				0.29 *			
Product Awareness				0.33 **			
Perceptions				0.04			
Customer Satisfaction				0.23 *	0.38	0.16 **	

Note: p < 0.10, \* p < 0.05, \*\* p < 0.001.

In terms of mediating the effect of customer satisfaction on different variables, the majority of the obtained results show significance. There was a significant relationship between product awareness and customer loyalty at p < 0.001 with a  $\beta$  value of 0.33. The quality of services and customer loyalty relationship was also significantly mediated by customer satisfaction at p < 0.5 with a  $\beta$  value of 0.29. In the case of the relationship with customer loyalty, it was found to be significant at p < 0.5 with a  $\beta$  value of 0.23. However, not all cases showed significance. An anomaly was observed in the case of the mediating effect of customer satisfaction on perceptions and loyalty. The value was found to be insignificant at a p < 0.1 and  $\beta$  value of 0.04. This, again, points to the behavioral tendencies of local people.

After performing the regression analysis to find the significance of the variables, the 10 proposed hypotheses were tested. The first hypothesis of this study was that quality of service has a direct and positive relationship with customer satisfaction. To test this hypothesis, quality of service was regressed with the customer satisfaction and the result (β = 0.15, p < 0.05) confirmed the existence of the hypothesized relationship between these two variables. These results are in line with the results of Omachonu et al. [43,64]. According to the authors, to build good relationships with customers and to keep them satisfied, a firm must provide good quality service. Both quality of service and customer satisfaction are mutualistic and are critical to the success of an organization [59]. In the case of Pakistan, studies such as Naveed et al. (2012) and Akhtar et al. (2011) also highlight the existence of the positive effect of service quality on customer satisfaction. The authors stressed the need to improve the service quality in order to increase customer satisfaction. Based on these results, the stated hypothesis is accepted. Overall, a total of 29 respondents stated that quality of service is a major influencer of their satisfaction in the discussion section as shown in Table 4. Table 4 provides the count of key mentions based on the 47 open ended responses provided by the respondents. It shows the relations in terms of focus, the categorization by the respondents, the count as per the number of respondents mentioning it, and the percent share of respondents mentioning the relation in their responses.

The next hypothesis is that quality of service has a direct and positive relationship with the customer loyalty. Based on our results ( $\beta$  = 0.32, p < 0.001) the hypothesis is verified, indicating that quality of service has a strong relationship with customer loyalty, which is in accordance with the results of Lin and Sun [70], Hassan et al. [34], and Liu and Hung [63]. Searching for and acquiring new customers is quite expensive; therefore, to avoid this extra cost, the existing customers must be retained [48,49]. To maintain and successfully run a business in a competitive environment, a firm should provide high quality services to their existing customers [27]. Owing to the results and the pertinent studies, the hypothesis is accepted.

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<b>Table 4.</b> Key mentions in the open-	ended discussions.
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Relation	Category	Count	% Share
Quality of service → Satisfaction	Influencer	29	61.70
Product perception $\rightarrow$ Satisfaction	Influencer	26	55.32
Product awareness $\rightarrow$ Satisfaction	Influencer	24	51.06
Satisfaction $\leftrightarrow$ Loyalty	Mutually dependent	44	93.62
Satisfaction → Product awareness and Loyalty	Mediator	28	59.57
Satisfaction → Quality of service and Loyalty	Partial Mediator	12	25.53
Satisfaction → Product perception and Loyalty	Mediator	11	23.40
Satisfaction $\rightarrow$ Product perception and Loyalty	Does not Mediate	22	46.81

The third hypothesis is that product awareness has a direct and positive relationship with customer satisfaction. The results of the study ( $\beta$  = 0.21, p < 0.001) support and verify the hypothesis, in accordance with Esch et al. [95]. The authors studied the effects of product awareness on purchase intention and customer satisfaction. They argue that if there is more awareness of products and services among customers, higher satisfaction levels will be achieved. This aids the achievement of organizational goals and ensures business success. According to Hu et al. [80], the success of an organization in the ever-increasing competitive environment lies in the awareness of its products and services among its customers. In line with these relevant studies and statistical results, the hypothesis is accepted. Among the responses to the open-ended discussion question, a total of 24 respondents stated that product awareness was a major influence on their satisfaction. This again points to the influence of product awareness on customer satisfaction.

The fourth hypothesis of current study is about the direct and positive relationship between product awareness and customer loyalty. Considering the results ( $\beta$  = 0.38, p < 0.001), the hypothesis can be accepted. In the past, researchers like Faed et al. [83] and Bayraktar et al. [82] stressed the positive relationship between awareness and customer loyalty for organizational success, which is verified by the current study. If the awareness of the products and services is high among customers, the customers find it easy to recall the product when making purchase or use decisions. This aids the sales process for organizations. It also helps establish a constructive feedback channel where the customers can provide high quality feedback to the organizations to improve their services and products.

The next hypothesis states that perceptions and customer satisfaction have a direct and positive relationship. The analysis of this relationship using linear regression analysis yielded satisfactory results ( $\beta$  = 0.48, p < 0.001), indicating an acceptance of the hypothesis. Further, the results show a strong and positive relationship between perceptions and quality of service. This result is consistent with studies of Krishnamurthy et al. [37] and Faed et al. [83]. The authors argue that if an organization is offering more services than expected by their customers, it creates a pleasant surprise. It makes the customers more satisfied, which generates a chain of positive word of mouth marketing for the company. These positives words are an asset to a firm in a competitive environment. Following similar lines, Islamic institutions can also benefit from such positive perceptions and satisfactions. Overall, a total of 26 respondents stated product perception as a major influencer of their satisfaction in the discussion section that amounts to more than half of the respondents stressing this aspect.

The sixth hypothesis is about the positive and direct relationship between perceptions and customer loyalty. To test the proposed relationship, perceptions are regressed with customer loyalty. Unlike the previous hypotheses, this one yielded an insignificant result ( $\beta = 0.15$ , p < 0.1), depicting a weak relationship between the variables. Based on the results, the hypothesized relationship between perception and customer loyalty is rejected. These results contradict the results of Bhattacharya and Sen [85], who found a direct and positive relationship between these two variables. This provides a research impetus for further exploration of this topic to add value to the body of knowledge in future studies. Yang

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and Peterson [94] introduced the concept of behavioral perspectives that may help us to understand the insignificant results. They argue that the behavior of customers is dictated by the locality and surroundings that may subdue loyalty and create a perceptive opposite to the usual way of thinking. Accordingly, people may perceive local brands negatively and may think of foreign systems as a better alternative [95–98]. This seems to be the case in Pakistan where foreign brands and services are often liked more and strived for as compared to local brands.

A positive and direct relationship between customer satisfaction and customer loyalty was proposed in the seventh hypothesis of this study. To analyze it, a regression analysis was performed for these two variables. The results show that a very strong and positive relationship exists between customer satisfaction and loyalty ( $\beta = 0.57$ , p < 0.001). This means that apart from being a mediator, customer satisfaction has a very strong and direct relationship with customer loyalty, which is in accordance with Anderson and Srinivasan [46]. As previously mentioned, a satisfied customer not only remains loyal but also spreads positivity about the firm through positive word of mouth. This adds more people to the pool of customers that the organization enjoys [99,100]. On the other hand, a dissatisfied customer does not remain loyal and adds to the negative marketing by spreading rumors and defaming the firm [38,101–103]. A total of 44 respondents, amounting to more than 93 percent of respondents, stated that their satisfaction and loyalty are mutually dependent in the open-ended discussion section as shown in Table 4.

In the next hypothesis, it was proposed that customer satisfaction plays the role of mediator of the relationship between quality of service and customer loyalty. To test this relationship, quality of service was regressed with customer loyalty while keeping customer satisfaction as a mediator. The results ( $\beta = 0.29$ , p < 0.05) supports the hypothesis. This result is in accordance with the study of Terpstra et al. [67] and Osman et al. [62]. However, it is worth mentioning that it is not a full mediation at the level of p < 0.05. Thus, customer satisfaction partially mediates the relationship between quality of service and loyalty. A total of 12 respondents stated that customer satisfaction mediates the relationship between their loyalty based on the service quality provided in the discussion section. However, this number is low compared to the other responses. The lack of responses in this case also augments the partial addressing of the relation between service quality and customer loyalty by customer satisfaction as mediator.

The ninth hypothesis is that the relationship between product awareness and customer loyalty is mediated by customer satisfaction. To test this hypothesis, a regression analysis of the relation between product awareness and customer loyalty was conducted, while keeping customer satisfaction as a mediator. Considering the results ( $\beta$  = 0.33, p < 0.001), the proposed hypothesis is accepted. According to the results, there is a strong relationship between product awareness and customer loyalty that is firmly mediated by customer satisfaction. This result is consistent with the study of Esch et al. [95]. Thus, customer satisfaction increases with increased awareness of the products and services offered by the organization, which induces loyalty and ensures the success of the organization. A total of 28 respondents stated their satisfaction is a mediator of product awareness and associated loyalty with a product, as shown in the discussion section shown in Table 4. This again supports the claims of Hypothesis 9.

In the last hypothesis of this study, it was theorized that customer satisfaction mediates the relationship between perceptions and customer loyalty. To analyze this relationship, a regression analysis between perceptions and the customer loyalty was conducted while keeping the customer satisfaction as a mediator. According to the results ( $\beta$  = 0.038, p < 0.1), the proposed hypothesis is rejected, as is evident from p < 0.1 and a very low  $\beta$  value. This indicates that customer satisfaction does not mediate the relationship between perceptions and customer loyalty. A total of 11 respondents stated that their satisfaction can mediate their loyalty and perception in the discussion section. On the other hand, 22 respondents stated that the perception and loyalty relation is not mediated by their satisfaction. The number who negate this claim is double those who affirmed it, which supports the rejection

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of the hypothesis. This relation is exclusive to the current study and was not observed in the literature. Accordingly, it is a humble and useful addition to the body of knowledge. This can be linked to the fact that the current study was conducted in a developing country where brands are limited and marketing has yet to matured. Moreover, the addition of online platforms to IFIs and the perception of customers about such services is an important factor in modern banking [28,96,104], but the same has not been represented in the current study population. Thus, the customers, though not completely satisfied, must deal and interact with the limited available brands. This deprives the customers of options and alternatives. In this context, it would be useful to see a similar study conducted in a developed country with more brands and alternatives. The subsequent results when compared to those of the current study may provide useful insights into these anomalies.

### 5. Conclusions

The current study investigates the implications of quality of service, product awareness, and perceptions about IFIs among existing and potential customers in Pakistan. Islamic banking and the sustainability of the technologies used in these institutions have been explored in detail in this study. Based upon an extensive literature review, a direct and positive relationship between quality of service, product awareness, and customer satisfaction and loyalty is highlighted. Pertinent hypotheses were formulated, and data were collected from 171 relevant respondents in Pakistan. These respondents are the customers of six IFIs in Pakistan and have at least two years of experience dealing with these IFIs. Statistical analysis using SPSS® and its core operations of reliability and regression reveals and verifies that customer perceptions have a direct and positive relationship with the quality of service provided to them. Thus, if one goes down, the other will follow and vice versa. The relationship between perceptions and quality of service is not significant, even in the presence of customer satisfaction as a mediator.

The study augments the claims of previous studies in different fields and statistically verifies the existence of a positive and direct relationship between quality of service and customer satisfaction for IFIs. While previous studies had provided evidence of the relationship between quality and services, the present study has further provided insights about how these factors come into play in the case of Islamic banking and the use of financial technologies. There is a positive and direct relationship between quality of service and customer loyalty. Therefore, providing high quality services will satisfy customers and increase their loyalty to the IFIs. Accordingly, the managers of existing IFIs should provide high quality services to their customers to enhance their satisfaction with and loyalty to these institutions.

The relationship between product awareness and customer satisfaction and customer loyalty was determined and statistically verified as being positive and direct. Both potential and existing customers should have knowledge of the products and services offered to them. This makes them feel comfortable and helps them to remember the products while making use or purchase decisions. Accordingly, IFIs must properly market their services to induce proper product awareness among their target customers and stay competitive in a global market. Managerial personnel are recommended to focus on proper product marketing to enhance their global outreach. Digitalization tools and techniques, as well as well-structured digital marketing strategies, may help in this context [105]. This includes a feedback system for linking the voice of customers to management and opening a two-way communication channel. Further, the positive statistical relationship between perceptions and customer satisfaction requires managers to give it due attention and take steps to improve the public perception of their products and services.

# Implications, Limitation and Future Directions

The results of the proposed study are useful for both researchers and practitioners. The former can investigate the highlighted anomalies among various variables and their relations and explore the root causes dictating these anomalies. The latter can assign proper

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resources and invest efforts into customer satisfaction and achieving loyalty based on key points in the study. These steps will propel a positive relationship between the customers and IFIs that will pave the way for more customer satisfaction and potential customer attraction. Additionally, a feedback system is proposed as part of the findings to provide a channel for two-way open communication between the customers and the managers of the IFIs. Such a feedback loop can shift the traditional rigid focus of IFIs towards a more customer-oriented focus that will raise the level of satisfaction among its customers. Moreover, on-ground exploration about the type of technologies being used by Islamic banks and the quality of internet banking services provided by these banks can further help identify the trajectory of sustainability of IFIs.

A limitation of the current study is its relatively small sample size of 400 respondents with 171 accurate responses. In this context, it is suggested that the relationships be tested on a larger sample size within a developed country. Further, our data were gathered from only 10 cities, which should be increased in future studies to capture a more the holistic picture of the overall perception of IFIs in Pakistan and other developing countries. Another limitation is that females and people of different age brackets were underrepresented among our respondents.

Future research is suggested to gather data from all over Pakistan and preferably in a developed country to build upon the current study and add more value to the body of literature. Additionally, the current study tested the results of three variables of customer loyalty, which can be aided in future studies by using other variables like convenience, religious motives, liquidity risks, etc.

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