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Customer Satisfaction and Service Standards: A Survey in Pakistan's General Insurance Market

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Abstracts:

Analyzing the key benefits of Insur-Tech through policyholders of six different selective general insurance companies from Pakistan's public, private, and Islamic sector is the main objective of the going on research. Multiple regression modeling and primary data from 155 existing corporate policyholders of general and Islamic insurance companies are taken into consideration in order to observe the level of satisfaction of the corporate customer thoroughly. Based on evidence, the study's results demonstrate that all of the Regressions have a positive effect on service quality in the study region. This indicates that changes in tangibles, empathy, responsiveness, and reliability significantly improve service quality by 0.606, 0.332, 0.262, 0.484, and 0.232 units, respectively, and improve long-term customer satisfaction with the utilization of services from general and Islamic insurance companies. First and foremost, offer clients high-quality services across all insurance offerings in accordance with global norms. Secondly, businesses with low customer loyalty should focus on developing customer loyalty through higher quality of service. Thirdly, in order to decrease customers' inclination to move from insurance, businesses need to offer a wide range of superior services.

Keywords: Reliability, Assurance, Tangibility, Empathy, Service quality and Customer Satisfaction, Retention and Pakistan

1.1 Introduction

This study looks into the connection between consumer satisfaction and service standards, with a primary focus on process changes and management strategies for quality services provided to end users (Siddiqui, 2010). In order to obtain the answers, information from the corporate insurance sector is gathered through research in the service industry of general insurance. Six leading general insurance companies from Rawalpindi and Islamabad—NICL, Adamjee, EFU, IGI, Salam Takaful, and Pak-Qatar have been chosen for this purpose (Shafiq et al., 2023).

As per Volosovych et al., (2021) the outcome of the 4th industrial revolution is communication and information technologies coupled with automated corporate processes and infrastructure. this is a reference to a set of nine technological pillars that comprise significant domains including big data, augmented reality, advanced robotics, cloud computing, additive manufacturing, cyber security, simulation, and integration on both a horizontal and vertical scale. In accordance with Nicoletti, (2021) Cutting-edge technologies have hastened the digital transformation of insurance organizations by enabling the innovation of new products, value chain activities, and business models. The term "Insur-Tech" was coined by combining the terms "insurance" and "technology," according to Ching et al., (2020).

The insurance industry was being significantly impacted by the digital revolution brought about by the use of cloud computing, digital apps, and artificial intelligence, according to Cukier, (2021) Digital platforms streamline the sales and marketing process while increasing company productivity in the direction of customer satisfaction. Block chain technology is being used by the insurance sector to enable data mining of insurance processes in order to find potential business opportunities.

On the words of Eckert et al., (2022) the insurance sector is crucial when it comes to human geography, risk, climate change, and technology constraints, researcher has also concurred that the insurance industry should embrace Insur-Tech as the technological infrastructure that includes chat-bots, telemetric, the Internet of Things, machine learning, artificial intelligence and predictive analysis. As indicated by Volosovych et al., (2021), has specified that the logic-based artificial intelligence system provides yield-based results in comparison to the traditional method of insurance business.

The Insur-Tech market's global revenue was \$5.48 billion in 2019 and is projected to rise at a compound annual growth rate (CAGR) of 10.80 percent to reach \$10.14 billion by 2025.

According to Vermesan and Friess, (2013) these technologies are altering the processes involved in product development, cost containment, risk assessment, and customer service management. Furthermore, by offering

technologically equipped products and an edge, it has allowed businesses to provide considerably more value to their consumers than was previously possible (Tardieu et al., 2020). Technologies advancements in the insurance sector, such as block-chain, big data and cloud computing were causing significant changes (Halima & Yassine, 2022). To accomplish activities like comparing items and pricing, obtaining contract details, and expediting basic service requests, consumers are choosing and depending more on new digital channels. The availability of a range of insurance products and services allows insurance firms to reliably meet the needs of their clientele (Kartikasari and Albari, 2019).

1.1.1 Importance of the ongoing research

Pakistan is working hard to move up the national development ladder from developing to developed level. This is a very ambitious aim that will require a lot of work in a lot of different areas, like technology and insurance. Insurance companies in other Asia countries were actively utilizing digital platforms, in line with global trends, to advertise their product lines, enhance pre- and post-sale services for existing customers, and respond to questions from potential customers (Salaam Takaful and Pak-Qatar Takaful 2023). In Pakistan, various technological, organizational, and environmental factors had an impact on the adoption of novel technologies like artificial intelligence (IAP 2023).

According to Park et al., (2021), previous research was shown that digital innovation had a widespread effect on the insurance industry's value chain, product development, underwriting and claims processing, administration of insurance policies, sales and distribution of insurance products, pricing strategies, asset-liability management, and risk management protocols, among other areas. As stated by Eling & Lehmann, (2018) Communication and information technology adoption in Russian insurance companies could be facilitated by three main factors: "enhanced competitiveness, improved service quality, and cost savings in managing individual customers and business transactions in line with customer preferences". According to Kaur, (2022) the underwriting and claim settlement procedures were impacted by the additional advancements in these technologies. It is simpler for customers to conduct online transactions when it comes to property and casualty insurance and to compare insurance products using comparison portals (Kaigorodova et al., 2021)

1.1.2 Insurance Sector Overview

The main root cause of this is because the people in charge of the industry have a vested interest in continuing its outdated and antiquated processes. Even just a brief glance at the industry's history, it is clear that the rot had already begun at the beginning. Foreign insurance companies controlled the nation throughout the early years of the insurance market in Pakistan (SBP, 2023). According to Tsoukatos, (2006) there was a sort of order in the workplace, which contributed to the public's perception of corporations as well as their reputation and level of approval.

However, as a new class of businesses arose, founded primarily on government concessions, they entered the insurance market with the intention of holding onto the premiums paid by their affiliated companies to other insurers. They just made another pocket to hold the cash they were previously using for premiums. As the tide began to turn, international insurers began to pack up and depart one by one (Akhter et al., 2011). As a result, this is how the majority of regional insurers developed, with their primary sources of income being their communities or associated businesses. According to SECP (2023), there are over thirty enterprises in the country that operate, with the top three accounting for over sixty percent of insurance industry market share.

According to a scathing statement made in the early 1990s by an industry veteran, every management, large or little, hides behind commissions. For the commissions they receive from insurance, banks are even stealing from their clients. Therefore, commission income is the lifeblood of the insurance industry, and all other important components that are inextricably linked to the business have been discarded (Asian Bank Development, 2023). These components include risk price, risk management, prudent underwriting, and equitable reinsurance sessions (to reduce reinsurance costs), prompt and equitable claim settlement, genuine underwriting profit, and ethically sound professionals (Pakistan Credit Rating Agency Ltd, 2023). But, the sector is currently at a crossroads since digitization will completely upend the current structure (Shafiq et al., 2023).

The status quo is not sustainable, and the sooner our sector embraces new lifestyle choices, the better off it will be. The global insurance market has already felt the necessity of being "digitally first," and this revolutionary trajectory will alter business as usual. A new generation of customers will be brought about by data automation and artificial intelligence, leading to the development of innovative models and revenue streams. The local industry has traditionally considered higher profitability and lower operating expenses to be unattainable, but with the new trend setting in, these goals are now easily achievable (Nicoletti, 2021).

According to Soa (2021) Adopting the Internet of Things, sophisticated analytics and machine learning, collaborating with Insure Tech companies and traditional insurance companies, and utilizing artificial intelligence are the ways to go. The simply challenge is to embrace the creative destruction storm and purge the sector of

unscrupulous behavior and those who profit from it. Another is to establish a digitalization framework that is consistent with contemporary methods.

The regulator's involvement is more significant, they ought to establish guidelines that assist business in escaping the rut it has been in for many years and foster the trust that is, regrettably, lacking between dealing parties. Ultimately, his main responsibility is to protect the interests of the public that is insured, as stated in the introduction of the Insurance Ordinance 2000 (Sigma report, 2023). It is imperative that all relevant parties take action to transform this industry in order to protect the economy's and the public's interests.

By supplying a range of insurance products to corporations and individuals, the insurance sector contributes considerably to the financial industry. Risk management and financial protection against probable losses or unplanned occurrences, such as accidents, natural disasters, theft, health difficulties, etc., are its major aims. Insurance minimizes the financial burden on any one party in the case of a loss by spreading the risk across a larger number of policyholders (Khan et al., 2020).

Furthermore enhancing the liquidity of these markets is the insurance industry's investment in its capital reserves. The overall assets of the insurance sector rose to Rs.2, 634.00 billion in the year of December, 2022 from Rs.2305.00 billion the previous year, a 14.50 percent gain. Concurrently, the industry had remarkable revenue expansion of 27.50 percent, with the direct gross underwritten premium increasing to INR 579.00 billion from INR 455 billion in the year of 2021 (IAP, 2023).

The assets of the life insurance market were Rs. 2,176.00 billion, while the non-life insurance industry has assets of Rs. 456.00 billion, according to the sector-by-sector breakdown. In terms of profits, the life insurance sector underwrote Rs. 375.00 billion in 2022, while the non-life insurance sector reported collecting Rs. 205.50 billion in premiums, the premium that the Pakistani government paid, to the reinsurance business functioning in the country was Rs. 25.50 billion.

There are 2 reinsurance brokers, 4 third-party administrators, and 250 surveying companies (approx), 393 authorized surveying officers on the intermediate side, and 22 insurance brokers in the insurance market. All of these entities are officially registered with the SECP (Pakistan Credit Rating Agency Ltd, 2023).

During the 2022–2023 fiscal years, several policy initiatives were implemented with the goals of improving the regulatory environment for the insurance business, encouraging market development, and safeguarding consumer interests (Adamjee, 2023). Furthermore, SECP began aggressively pursuing measures to improve consumer protection and eradicate systemic shortcomings in the business. The subsequent passages accentuate the significant modifications and novel endeavors (NICL News 2023).

1.1.3 Objective of the Study

This study's main goal is to identify corporate policyholders' "customer satisfaction level" in order to apply the SERVQUAL Model to sector-specific research.

1.1.4 Significant of Study

Observing public behavior and their level of satisfaction with the insurance sector is the principal objective of the study. With this data, insurance firms may better customize their policies to meet the requirements and preferences of their customers.

Additionally, consider the component that lowers the danger for people with low incomes. The study has revealed several areas in need of further research. To begin with, Tākāful General was a relatively unknown field of Islamic insurance, especially in Pakistan. In addition, though there has been a great deal of theoretical literature on Tākāful, practically little study has been done on Islamic Insurance (Tākāful General), and the establishment of an Islamic window in the public sector is still pending. Policyholders' opinions regarding customer behavior, satisfaction levels, and service quality issues have been excluded from both the public and Islamic sectors. As an Islamic nation of Pakistan with 98 percent of its people being Muslim, Tākāful general's market share is only 0.9 percent, remaining below one percent.

2.1 Literature Review

The concept of service quality was defined as the client's opinion or evaluation of the overall excellence or superiority of the service. Perceived service quality, according to Zeithaml et al., (1990) was the result of customers contrasting their expectations with the services they think the providers have delivered. It has been claimed that meeting or exceeding customers' expectations for the service was necessary to ensure a favorable opinion of the quality of the service. According to Lewis et al. (1994), there will be a void that has to be filled with strategies that also have an impact on the supplier's expectations if the genuine service is perceived to fall short of expectations.

A widely recognized five-point "set of service standards dimensions" (SERVQUAL) was published by Parasuraman et al., (1988) and as per Othman and Owen (2001), this dimension of service quality was one of the

most often used and cited components in writings about service quality. These criteria—tangibility, assurance, responsiveness, reliability, and empathy—have been used by numerous service companies to gauge high-quality performance. Kandampully (2007) defined tangible qualities as items such as equipment, staff uniforms, and technology. This component dealt with the physical presence of services and the perceived quality of the persons, equipment, and supplies that the service provider utilizes. It has to do with how successfully the business keeps its word. It is the ability to keep promises made and perform the promised service reliably and consistently.

According to Delgado-Ballester (2004), the likelihood of customers returning to a company was low if they were dissatisfied with the service or staff. The thoughtful, personalized attention was related to empathy, Other than the level of comprehension that staff members exhibit regarding the wants of clients. In accordance with Kandampully (2007), Assurance is referred to the degree to which client trust and confidence are cultivated by the company's staff. According to Prayuhda & Harsanto (2014), the service provider wants to be expeditious and supportive in providing the support, moreover as per Kartikasari & Albari, (2019), responsiveness was the determination of service staff to provide prompt, efficient customer service. It includes aspects such as cooperation, kindness, and compassion.

As proven by Kotula (2021) sectors where enduring relationships with clients and consumers are crucial to existence have found that elevated service quality was more attractive and significant, As per Delgado-Ballester, (2004) states that there was a very high probability of customers returning to a company if they received exceptional care and attention. Caruana (2012) defines service quality as the difference between the customer's perception of the services they received and their pre-service expectations of the quality of service. Raising the quality of services rendered to the extent that clients perceive higher-than-expected service levels boosts a company's competitive advantages and boosts its bottom line.

In Ghana, Kyeremeh, et al., (2019) looked into how Communication and Information Technology (CiT) affected banks' ability to provide financial services. The study used exploratory and descriptive designs in its application of qualitative research to analyze its qualitative data. A set of structured questions were presented to fifty Barclays Bank clients. CiT has been shown to significantly impact client service delivery in terms of performance, which has an impact on Barclays Bank's expansion. The study suggested improving the operation of ATMs, networks, and Barclays Bank in order to improve consumer satisfaction. This study focused on insurance businesses in Nairobi City County, Kenya, with the context of the inquiry being in Ghana.

In 2020, Kazakov, Ruiz-Alba, and Munoz assessed how Internal Market Orientation (IMO) affected the way associations were presented in SMEs while accounting for employee loyalty and job satisfaction. In the study, 316 SME employees were selected using multistage selection approaches as part of a survey research approach. The study confirmed that the use of Communication and Information Technology (CiT) is encouraged. Additionally, the operationalization of the SMEs idea and the efficacy of the IMO suitability have a positive impact on how SMEs carry out their business operations.

Mukyala et al., (2020) examined the impact of CiT on customer service satisfaction using the example of Centenary Bank's Pallisa Branch. A questionnaire-based method was used to conduct survey research on 160 individuals. The study's findings showed that technology and a focus on the market had a detrimental impact. In addition, there was an inverse relationship between customer service automation and service automation. The adoption of technology does not always translate into increased customer satisfaction. Accordingly, in order to achieve the intended positive impact on customer satisfaction, information technology should be implemented gradually. Kucia et al. (2021) found that customers use CiT to determine value from a sustainable growth viewpoint. This study, conducted in Nairobi City County, Kenya, followed the CiT study and focused on the satisfaction of insurance clients.

By applying a quantitative analytic method, the study located 1134 Polish customers. The reason for this is that the nation benefits from the large and quickly expanding e-markets in Europe. This was discovered that informal online and offline communication, as well as client management, are crucial components of the process. The study found that in order to obtain more control over the market, businesses can encourage client participation through online business environments by engaging in co-innovation that benefits both the companies and the customers. However, as this research shows, the research was carried out in the Polish context, not the Kenyan context (Kucia et al., 2021).

3.1 Methodology

The purpose of this research approach was to better understand the main effects of service quality on customer satisfaction levels in various settings. They offered data to substantiate the differentiation over SERVQUAL model based solely on performance, maintaining the same items scale suggested by Parasuraman et al., (1988), based on empirical study across several industries, including pest treatment, fast food, dry cleaning, insurance, and banks. In addition, the case study methodology—which employs both explanatory and descriptive research

designs—argues that using a variety of methods can improve the opportunities for testing hypotheses, as well as the reliability of the research findings and the ability to draw conclusions from them Mark et al., (2009). After statistical analysis with a model that utilized multiple linear regression and semi-structured interviews, it was triangulated with the quantitative result.

3.1.1 Data Source & Collection Method

A questionnaire and semi-structured interview were employed as primary data sources in the study. Respondents with excellent service at the chosen general insurance businesses in the twin cities were given a questionnaire. Cronbach Alpha was used as a pre-test for consistency in the questionnaire's design, which was informed by prior empirical material. On a 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," Measures included the components of the service quality dimensions and the outcomes of the customer satisfaction items. The research subject asked how much they agreed or disagreed with the service quality standards that their insurance companies offered.

Additionally, a few demographic inquiries were made. Each questionnaire is directly delivered to the customer, who receives instructions before filling it out. Additionally, they conducted semi-structured interviews with operation managers from a few chosen insurance organizations. The Corporate policyholders from the chosen public and private insurance companies, NICL, Adam-jee, EFU, IGI, Salam Takaful, and Pak-Qatar Company, who are active clients, made up the study's population. The measurement of service standards offered by general insurance companies have been recognized as one of the most vital aspects.

3.1.2 Research Method

The purpose of the descriptive research approach is to gauge the level of consumer satisfaction and attitude toward nonlife insurance companies. The satisfaction is analyzed using primary data. In order to gauge the degree of satisfaction among corporate clients who profited from the services and goods provided by these general insurance companies, primary data on 155 current corporate policyholders of both general and Islamic insurance was obtained from the insurance companies in Islamabad and Rawalpindi. Online techniques and surveys were used to get the raw data, utilizing relevant statistical procedures, such as cross-tabulation and percentage analysis. The findings of the analysis of the gathered data were interpreted.

3.1.3 Multiple Regression and SERVQUAL Model

The power of customer satisfaction on service quality provided by the policy holders of six different insurance companies—which were previously described—has been highlighted in the second phase of the study using a multiple regression model, which was chosen due to the primary nature of the data. The ways in which researchers conduct their research, define what constitutes valid knowledge, gather data, decide which aspects to study (e.g., by using qualitative or quantitative methodologies), and function within the overall operation are all influenced by the different perspectives and opinions they hold. Thomas Kuhn's groundbreaking book *The Framework of Scientific Revolutions*, published in 1962, may be credited with sparking the conversation about the insurance paradigm. The most effective method for gathering data was through surveys. Structured interviews were developed to help insurers comprehend the differences between Islamic and conventional insurance, both theoretically and practically, as well as the ways in which Islamic products differ significantly from conventional goods. A systematic questionnaire was developed based on the customer-focused inquiries. The SERVQUAL RATER Model was used to measure most of the variables, with the exception of demography (Parsuraman et al., 1985).

Chang and Gao (2021) performed a multiple regression analysis on primary data to examine the impact of customer satisfaction on the quality of service rendered by policy holders across six distinct insurance companies. Multiple regression models were typically written as

$$SQ_{ij} = \beta_1 + \beta_2 Reliability_{ij} + \beta_3 Assurance_{ij} + \beta_4 Tangibles_{ij} + \beta_5 Empathy_{ij} + \beta_6 Responsiveness_{ij} + \epsilon_t$$

As explained in the secondary data equations, the main data measurement's slope was β_1 to β_6 , and the simulation model's intercept was β_0 in an equation. These slope coefficients investigated how changes in each of the regressors — reliability, assurance, tangibles, empathy, and responsiveness—affected the dependent variable of service quality in relation to unit changes. Ultimately, the residual component of the model existed when ϵ was present. Robust standard errors correction techniques were also employed to avoid the well-known issue of heteroskedasticity in the primary data. Multicollinearity tests (VIF and Tolerance) were also applied at the conclusion of the regression model to verify that the variables were perfectly and imperfectly uncorrelated with

each other. The mean of each regressor was compared with service quality using an independent t-test for all insurance companies after this model (Gerald, 2018). T-tests are typically written as

$$t = \frac{(\bar{w}_1 - \bar{w}_2) - (\mu_1 - \mu_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

In the Equation 11, the variables w_1 , w_2 were the means of first and second observations while μ_1 and μ_2 were the values of first and second demographics. In conclusion, the usual deviation and model size of populations 1 and 2 were represented by s_1 , s_2 , n_1 , and n_2 . On the other hand, $n_1 + n_2 - 2 = DF$ has been found to be the degree of freedom for the exact measure for Lakens (2013).

3.1.4 Variables and Data Description of Model

Under the Second Model, the dependent variable is service quality, whereas the independent variables are the following:

R: (Reliability) capability of the company to fulfill service commitments accurately.

- A: (Assurance) employees' ability to motivate
- T: (Tangibles) this term describes a worker's physical characteristics and look.
- E: (Empathy) was giving each client personalized attention and compassion.
- R: (Responsiveness) motivation of responsiveness firm to provide services and help clients.
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Figure 2. SERVQUAL Model's Design

3.1.5 Theoretical Framework

• **Adverse Selection Theory and Information Lop-sidedness:** Adverse selection and information imbalance were two issues that faced Islamic insurance, just like they did Western insurance. Econometric models could be utilized to comprehend the impact of knowledge inequality on Tākāful activities. These theories and models, which incorporate elements that resolve information gaps and adhere to Sharia law, may aid operators in making difficult decisions (Siegelman, 2003).

• **Theory of Wakalah-Mudaraba Hybrid and Wakalah:** The Waklah (agency) and a hybrid Wakalah-Mudaraba framework are two possible approaches used by Tākāful providers. While the Mudaraba component contains a profit-and-loss sharing arrangement, the Wakalah model involves a service fee. The choice of operating philosophy made by Tākāful operators affects the way they distribute earnings to members and provide income (Htay, 2012).

• **Theory of Tākāful Demand and Market Dynamics:** The analysis of demand for Tākāful items in different economic and demographic contexts can be achieved through the use of market dynamics theories. According to Deloitte (2015), econometric theories aid in the understanding of the factors influencing the demand for Tākāful by policymakers and operators, hence fostering the expansion of the market.

• **Profit-and-Loss Sharing Theory:** The profit-and-loss sharing (Mudarabah) doctrines served as the foundation for Takaful. To examine how policyholders and the Takaful operator split earnings and losses, econometric frameworks could be created. According to Ahmed & Kwatra (2014), these theories evaluate the effectiveness and equity of profit-sharing schemes, which helps to increase the adaptability of Takaful operations.

• **Quality Measurement Theory:** Like other service-oriented businesses, insurance companies may utilize SERVQUAL to assess client attitudes and expectations along the specified dimensions. According to (Ong, Joe Yee, 2022), the theory has the potential to identify development possibilities by revealing discrepancies between customer expectations and perceptions at various stages of their interaction with the insurance company.

• **Sharia-Compliant Investment Theory:** Investments made with Takaful monies in Sharia-compliant securities. A study of these investments' performance and compliance with Islamic finance rules may be conducted using econometric models. Due to the limitations of financial instruments that adhere to Sharia law, these models and theories helped to optimize investment portfolios by taking risk and return characteristics into account (Puspitasari et al. 2022).

4.1 Results and Discussions

4.1.1 Sampling and Statistics Collection Techniques

In two significant Pakistani cities, Rawalpindi and Islamabad, the current study was carried out. Based on the corporate policy holders of the six different companies—NICL (The National Insurance Company), Easter Federal Union (EFU), Adamjee General Insurance (Private) Limited, Jubilee General Insurance (Private) Limited, and Takaful insurance companies—M/s. Pak-Qatar Takaful General (Private) Limited and M/s. Salaam Takaful General (Private) Limited—the sampling unit was designed. A systematic sample technique using proportional stratified random sampling was used to get the data. As per Tejada and Punzalan (2012), the sampling size was estimated by utilizing Solvin's key approach. Table-1 provides further information about the total sampling.

Table.1The Overall Sample Size of the Existing Study

| Companies | Questionnaire Distributed | Questionnaire Rejected | Questionnaire Accepted | Valid Sample | Response Rate |
|-----------|---------------------------|------------------------|------------------------|--------------|---------------|
| NICL | 30 | 9 | 21 | 21 | 70% |
| EFU | 25 | 8 | 17 | 17 | 68% |
| Adam-jee | 25 | 9 | 16 | 16 | 64% |
| JGI | 25 | 9 | 16 | 16 | 64% |
| STL | 25 | 9 | 16 | 16 | 64% |
| PQT | 25 | 9 | 16 | 16 | 64% |
| Total | 155 | 53 | 102 | 102 | 65.8% |

Table 1 offers information on the analysis's sample, for the current investigation, the researcher personally visited insurance businesses and acquired data from corporate policyholders using widely recognized questionnaires. A remarkable 66 percent of GiP corporate policyholders responded to the 155 questionnaires that were distributed to them, yielding 102 valid replies. Moreover, these 102 questions were judged legitimate whilst performing the investigation.

4.1.2 Statistical Procedure to Predict the Accuracy of the Data

In this important section of the study, service quality and customer satisfaction toward non-life insurance enterprises in Pakistan's emerging condition have been examined. Examining the effects has involved taking into consideration the details of six different businesses that were previously mentioned. The purpose of the current study was to ascertain the function of service quality in non-life insurance firms by performing both qualitative and quantitative research in an empirical setting. According to Shafiq et al. (2023), the proportional stratified random sampling approach was employed to gather data for the current study using a well-structured questionnaire. This method has been previously addressed in depth.

Table 2. KMO, Cronbach's Alpha and Bartlett's test Statistics

| Test Statistics | Calculated Measures | Probability |
|--------------------------------|---------------------|-------------|
| KMO | 0.8651 | > 0.50 |
| Cronbach's Alpha | 0.9468 | > 0.50 |
| Bartlett's (Degree of Freedom) | 509.27 (10) | 0.000 |

Bartlett's test was used to determine the accuracy of the data in Table 2, and the KMO and Cronbach's Alpha Statistics tests were used to determine the study's sample adequacy. Firstly, the estimates for KMO and Cronbach's Alpha were much higher than the conventional value of 0.50, at 0.865 and 0.946, respectively, all it indicates is that the evidence being assessed was very trustworthy and should be carefully reviewed for further research. In contrast, Bartlett's test results showed 509.27 with a 10-degree of freedom. The data gathered was suitable for factor analysis, since these computations showed significance at the one point in percentage degree. Shafiq et al., (2023) found that all of these tests pave the way for major component analyses and regression analyses to examine the relationship between service quality and six insurance companies' perceptions of dependability, assurance, tangibles, empathy and responsiveness.

4.1.3 Multiple Regression Analyses of SERVQUAL Model

As with panel data, the principal results contained mean, standard deviation, minimum, and maximum values and presented the main findings of the summary data of the components. The standard deviation, on the other hand, indicates how much the chosen empirical data deviates from the mean value; the smaller the standard deviation, the more values were clustered around the mean. The mean values provide a common measure in the total numbers acquired. As per Khan et al. (2014), the minimum and maximum values represented the lowest and greatest values in the data. Table 3 shows the mean values for the following characteristics: 1.87, 1.467, 1.301, 1.204, 1.529, 1.319, and 0.782; the standard deviations were 3.53, 3.60, 3.63, 3.06, 3.54, and 1.87 for dependability, assurance, tangibles, empathy, and responsiveness. The Likert scale structure of the questions, which was based on strongly agree, agree, neutral, disagree, and strongly disagree responses, also means that all the other variables mentioned have minimum values of 1 and maximum values of 05, with the exception of SERVQUAL, which has a minimum value of 0.762 and a maximum value of 2.52 (Brittany Klokenga, 2020).

Table 3. SERVQUAL Model Summary Statistics

| Variables | Mean | Std. Dev. | Minimum | Maximum |
|----------------|------|-----------|---------|---------|
| Reliability | 3.53 | 1.467 | 1 | 5 |
| Assurance | 3.60 | 1.301 | 1 | 5 |
| Tangibles | 3.63 | 1.204 | 1 | 5 |
| Empathy | 3.06 | 1.529 | 1 | 5 |
| Responsiveness | 3.54 | 1.319 | 1 | 5 |
| SERVQUAL | 1.87 | 0.782 | 0.762 | 2.52 |

In order to ascertain whether the variables in the study were perfectly and imperfectly linked, multi-collinearity detection was carried out using VIF and Tolerance Table 4. VIF estimates for each of the regressors—reliability, assurance, tangibles, empathy, and responsiveness—were 4.24, 4.69, 4.12, 4.81, and 4.59, respectively. Tolerance values for each of the regressors in comparable background information were 0.235, 0.213, 0.242, 0.207, and 0.217, respectively. All estimated measures of VIF and tolerance explore whether perfect and imperfect multicollinearity is present in the data obtained for the primary study since the calculated values of VIF and tolerance for each variable were less than 5 and significantly higher than zero. The coefficient's findings are confirmed by prior study of Khan et al., (2014)

Table 4. VIF and Tolerance Estimates to Envisage Multicollinearity

| Variables | VIF | 1/VIF |
|----------------|------|-------|
| Reliability | 4.24 | 0.235 |
| Assurance | 4.69 | 0.213 |
| Tangibles | 4.12 | 0.242 |
| Empathy | 4.81 | 0.207 |
| Responsiveness | 4.59 | 0.242 |

Table 5 delves into the discussion of multiple regression models and their efficacy in examining the service quality of corporate policyholders across six insurance companies in Rawalpindi and Islamabad. The variables regressors include reliability, assurance, tangibles, empathy, and responsiveness. All of the regressors had a positive effect on service quality in the study region, according to the research's empirical computations. Furthermore, estimates indicated that a 0.606-unit increase in service quality results from every unit increase in dependability (Khan et al., 2014). The service quality is raised by 0.332 units when the units of assurance were increased. Service quality is raised by 0.262, 0.484, and 0.232 units, respectively, with increases in tangibles, empathy, and responsiveness, as was previously mentioned. Once every variable's influence on service quality was thoroughly discussed, it became clear that improving each of the five essential components of service quality was necessary to raise the level of service provided by insurance businesses in the research region. Approximately 40 percent of the variance in dependent variables was attributed to independent variables, with the remaining 60

percent being the result of exogenous factors influencing the model, according to the goodness of fit analysis of the r^2 model. According to the R-Squared model's goodness of fit analysis, independent variables accounted for around 40 percent of the variation in dependent variables, with the remaining 60 percent being attributed to exogenous factors that modify the model. Researchers considered this R-squared number to be a pseudo measure despite its low value, since it was attributed to the main nature of the data. As per Brittany Klokenga (2020), the findings of the coefficient were validated using the Theory of Service Quality Measurement. Last but not least, the model's significance stems from the F-statistics value, which favors the alternative hypothesis that at least one computed coefficient is non-zero over the null hypothesis that all computed coefficients are zero. To put it simply, this indicates that each regressor has a significant effect on the dependent variable, which is service quality.

Table 5 SERVQUAL Multiple Regression Results

| Variables | Coefficients | Std. Error | T-Statistics | Probability |
|---------------------|--------------------|----------------|--------------|-------------|
| Reliability | 0.606 ^a | 0.086 | 6.99 | 0.000 |
| Assurance | 0.332 ^a | 0.102 | 3.23 | 0.002 |
| Tangibles | 0.262 ^b | 0.104 | 2.52 | 0.013 |
| Empathy | 0.484 ^a | 0.088 | 5.46 | 0.000 |
| Responsiveness | 0.232 ^b | 0.100 | 2.32 | 0.022 |
| C | 1.947 ^a | 0.221 | 8.78 | 0.000 |
| R-Squared | 0.395 | Adj. R-Squared | 0.3640 | - |
| F-Statistics | 12.68 ^a | 0.000 | - | - |

a= 1 percent, b=5 percent and c=10 percent significance level

Applying independent T-test estimates, Table 6 examines the differences between expected and actual service quality for each of the five components of public, private, and Takaful insurance businesses. Customers' expectations for service quality were significantly greater than their perceptions in all aspects, as indicated by the significance scores assigned to each category. There was a significant variation in the consumer's perception of the dependability of the quality of service, as indicated by the significant differences in the T-test findings for expected and perceived reliability at the one percent significance level. Muhamat's (2021) Theory of Governance and Transparency supported the values of the coefficient. Similarly, the T-test results revealed a significant difference in customer opinions and expectations regarding the assurance component of service quality at the one percent significance level between predicted and perceived reassurance. According to Wang and Shaun (2019), there was a significant difference between customers' perceptions and expectations for the tangibles component of service quality. This was demonstrated by the T-test results for predicted and actual tangibles, which were significant at the one percent significance level. Furthermore, the results of the t-test for perceived and expected empathy were significant at the 1 percent significance level, indicating a significant difference in the way customers evaluated the empathy component of service excellence. In conclusion, policyholders' expectations and perceptions of the responsiveness component of service excellence differ significantly, as evidenced by the T-test results for expected and perceived responsiveness being significant at the one percent significant level (Wang et al., 2021).

Table 6. Independent T-Test to Authenticate the Regression Model

| Sr. No | Variables | T-Test | D.F | 2-tailed Sig. | Mean | Decision |
|----------------|-----------|--------|-----|---------------|------|----------|
| D ₁ | R to SQ | -14.28 | 204 | 0.000 | 1.76 | Accepted |
| D ₂ | A to SQ | -15.12 | 204 | 0.000 | 1.80 | Accepted |
| D ₃ | T to SQ | -15.57 | 204 | 0.000 | 1.81 | Accepted |
| D ₄ | E to SQ | -12.22 | 204 | 0.000 | 1.53 | Accepted |
| D ₅ | RE to SQ | -14.82 | 204 | 0.000 | 1.77 | Accepted |

5.1 Conclusion

The main purpose of this study was to find out how customer satisfaction was impacted by each of the five aspects of service quality: dependability, tangibility, assurance, and empathy. According to the conceptual model put forward in this study, which is based on the SERVQUAL model developed by Parasuraman et al., (1988), service standard's significantly affects consumer satisfaction and retention. To understand the service standard's performance of the policyholders, marketing insurance experts have identified assessing the standards of services provided by corporate organizations as one of their most essential topics of study in insurance (Ong, Joe Yee, 2022). It has been shown that service standards and consumer satisfactions are essential to increasing a company's overall performance, especially in the general insurance business.

Based on the literature study and research findings, it can be concluded that the approach is utilized to enhance customer services in order to increase customer satisfaction and establish a competitive edge over rivals through

service differentiation. In Kenya's non-life insurance companies, the first goal was to determine how much information technology agility affected client happiness. According to inferential statisticians, insurance businesses' client satisfaction is reinforced when they prioritize information technology above other aspects. The majority of insurance companies made investments in digital systems to provide services more effectively, according to descriptive findings. Since the majority of these insurance firms have a well-established digital system sharing plans with their clients, information from clients is promptly sent to insurance brokers. The findings also show that insurance firms were updating their information infrastructure on a regular basis. It was observed that insurance firms used information technology infrastructure to guarantee the sustainability of their operations. An external digital rapid connection system is also often used by most insurance companies to ensure that the company is always bringing in new ideas to improve information technology accessibility.

Although insurance firms have embraced technology, it's important to keep in mind that the Department of Strategic Research and Development (R & D) strictly regulates the process in stages. Information technology agility positively affects customer satisfaction, according to empirical data. That means that the strategic choice improved service delivery by raising accountability, efficiency, and transparency. Customer happiness and loyalty are therefore ensured, which is vital for enhancing the organization's competitiveness. The results indicate that customer happiness has a big influence on the insurance industry. The insurance sector and its functions are not well known to many individuals. Due to the fact that it is motivated by interest, some believe it to be against Islamic law. Islam forbids the earning of interest from investments. While some insurance companies have already started offering Takaful-based insurance to individuals, the government and the insurance industry should come up with a plan to raise awareness of the sector and entice people to invest in it. The government must to educate the populace about Takaful and its functions as well. In order to raise public awareness, the government should host a seminar. The insurance industry is a vital financial intermediary that helps people, businesses, and entrepreneurs manage a variety of risks. The deregulation process that was implemented in 2020 gave the insurance industry in Pakistan a boost and created a level playing field for private enterprise. Nevertheless, there is a dearth of information regarding the effectiveness of the insurance sector and the degree of customer satisfaction in the context of Pakistan. Our study aims to establish new benchmarks for evaluating the effectiveness of the Islamic and conventional insurance sectors in Pakistan. To assess service quality, we used a modified SERVQUAL model to compile data on a subset of insurance companies from 2012 to 2022. In order to verify the effectiveness of this industry, we also examined a number of financial ratios.

i. The results of the study regarding the quality of services show that the gap between expectations and perceptions in the insurance industry as a whole is significant, standing at -0.66; that is, expectations exceed perceptions. Consequently, in order to raise customer satisfaction, the industry must enhance the quality of services it provides in the areas of responsiveness, convenience, empathy, and reliability. Furthermore, the Islamic insurance sector must further enhance the Shari'ah compliance of its operations.

ii. The results also show that there is little difference in service quality between Islamic and traditional insurance providers in terms of responsiveness, convenience, reliability, and empathy. On the topic of compliance and Shari'ah knowledge, however, there are notable differences between Islamic and mainstream insurance firms. Compared to conventional respondents, Islamic insurance company respondents have greater knowledge regarding Shari'ah compliance. According to the results, respondents from Islamic insurance companies believe that Islamic insurance contracts are more compliant with Shari'ah than those from conventional companies. One possible explanation for this could be the extensive understanding of the contract's compliance with Shari'ah.

iii. According to the preferences construct, respondents from Islamic insurance companies give higher priority to variables related to the business's compliance with Shari'ah, when compared to respondents from conventional insurance companies. Nonetheless, risk management is highly valued by both categories of respondents. The study's conclusions imply that corporate policy holders represent a potential market for insurance companies. The results show that cost and allocative efficiencies are trending downward over the analysis period. This could be attributed to rising input prices as well as the growth of the branch network and workforce during it.

iv. The results of this study also point to a significant improvement in Pakistan's conventional and Islamic insurance industries' service quality and efficiency. Regarding the quality of their services, both kinds of businesses fell short of their customers' expectations in every way. Therefore, in order to satisfy customer expectations, both kinds of businesses must raise the quality of their services. According to the quality of their services, both kinds of businesses must increase their efficiency.

According to the findings, there is no discernible correlation between the effectiveness of the corresponding Islamic and conventional insurance companies' services and their service quality because there is little difference between the two kinds of businesses. Another explanation could be that cost efficiency necessitates cost reduction and that raising the caliber of services may result in higher costs. The results generally suggest that businesses still need to increase or maintain their level of efficiency in order to raise the quality of the services

they provide. The Islamic insurance sector needs to raise the caliber of its services across the board and ensure that its operations comply with Shari'ah. Even though this industry's cost-efficiency outcomes were somewhat better than average, it still need work to reach maximum cost-efficiency. Hence, in order for the Islamic insurance sector to continue operating and perhaps experience sustained expansion, it must improve the quality and efficiency of its services.

5.1.2 Policy Recommendations

The paper offers corporate insurance businesses a number of recommendations.

First, in accordance with the vision and mission of the regulator and government, businesses should endeavor to uphold the caliber of services they offer in the state, while concentrating on raising it above the current standards by attending to all of the demands and preferences of clients. In order to improve consumer satisfaction with the caliber of services, businesses must also make sure they provide all insurance services offered by global firms and guarantee that their clients receive the best care possible. Secondly, It is recommended that insurance businesses in Pakistan that are experiencing low levels of client loyalty focus on enhancing customer loyalty by enhanced service delivery and addressing customer needs as quickly and efficiently as feasible. Thirdly, businesses should strive to lessen consumers' inclination to move insurance providers by offering a wide range of superior services. Lastly, it would be beneficial to support studies and research aimed at figuring out what factors influence the quality of services rendered by Pakistani insurance companies as well as what criteria are critical in terms of customer satisfaction, loyalty, and switching.

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