

## Servqual-Based Service Quality Optimization to Drive Profit Growth at ITTR English Course

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### Abstract

A long standing English language school in Indonesia called ITTR English Course has seen flat profits even though student numbers have remained steady, which suggests there are deep problems with the quality of its services. The goal of this research is to assess current service standards and develop strategic improvements that will boost student satisfaction, increase retention, and lift the institution's financial performance. Using a sequential explanatory mixed-methods approach, this research combined quantitative SERVQUAL surveys analyzed through Structural Equation Modeling (SEM) with qualitative NVivo analysis to pinpoint service issues. Problems were diagnosed using Fishbone and Current Reality Tree (CRT) methods, ranked through Analytic Hierarchy Process (AHP), and addressed by developing action strategies with the House of Quality (HOQ) and the Plan-Do-Check-Act (PDCA) framework. Based on the study, student satisfaction is most heavily influenced by the reliability and assurance aspects of service quality. Satisfied students then become loyal customers, which directly supports the institution's bottom line. The author recommends focusing on teacher training, classroom facilities, and communication speed, alongside implementing scheduled feedback systems. In conclusion, managing service quality effectively is demonstrated to be the best way to secure ongoing student fulfillment, retention, and profitability.

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## INTRODUCTION

The rapid pace of globalization and the digital transformation taking place across various sectors have made English language proficiency an increasingly important skill for individuals around the world (Al Fraidan & Alaliwi, 2024; Chao, 2025; Fitria, 2024; Kumar, 2023; Lu, 2024; Raajitha, 2023; Rachuri, 2022). Nevertheless, English proficiency in Indonesia still faces various challenges. According to data from the English Proficiency Index (EF EPI) for 2023, Indonesia ranked 79th out of 113 countries and regions surveyed, placing it in the “moderate” proficiency category. This ranking indicates that there remains a gap between the English language proficiency required by global developments and the actual abilities of the majority of the Indonesian population. The importance of English proficiency is becoming increasingly evident in academia and the workplace. In the corporate sector, English proficiency is a key factor in facilitating international business communication, cross-border collaboration, and access to global markets (Abo-Khalil, 2024; Azhari & Satimin, 2024; Chalapati, 2024; Hanley & Chankseliani, 2026; Roshid & Kankaanranta, 2025).

Meanwhile, in higher education, English proficiency is often a key requirement for participating in student exchange programs, obtaining international scholarships, accessing

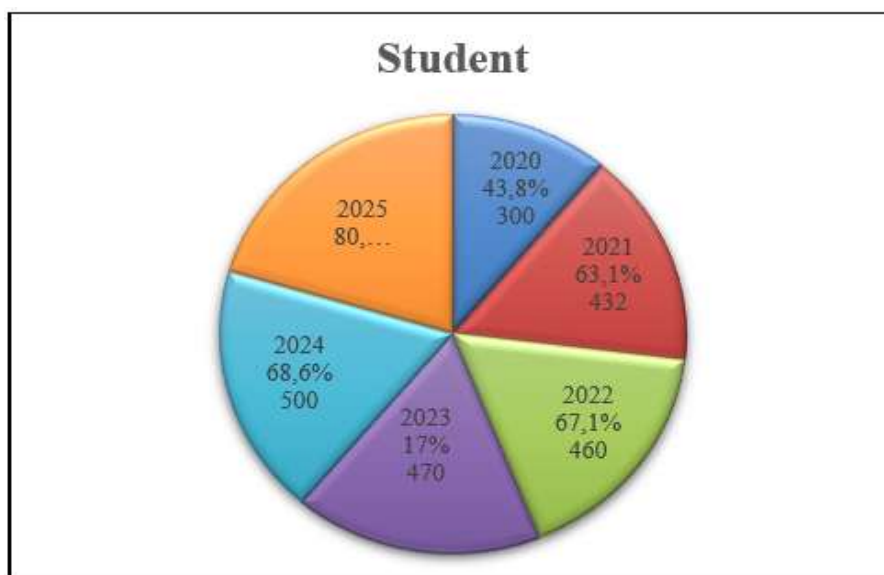
reputable academic literature, and pursuing undergraduate or graduate studies both domestically and abroad. Recognizing the importance of these competencies, the Indonesian government, through the “Ministry of Education, Culture, Research, and Technology”, has promoted the strengthening of foreign language skills through the “*Merdeka Belajar–Kampus Merdeka*” (MBKM) policy. This program provides broader opportunities for students to develop global competencies, including English language proficiency, through various academic and non-academic activities. As a follow-up to this policy, many universities in Indonesia have begun requiring English proficiency certifications, such as IELTS and TOEFL, as a graduation requirement or a prerequisite for participating in student exchange programs and other international academic activities.

The growing public demand for English proficiency has had a significant impact on the development of the English language course and training industry in Indonesia. The ever-increasing demand from students, college students, professionals, and the general public has spurred the emergence of various non-formal educational institutions offering English language programs with a variety of methods and approaches. According to data from the Ministry of Education and Culture (2023), there are more than 9,000 English language course institutions officially registered and operating in Indonesia. This figure reflects the rapid growth of the English language education sector as well as the vast market opportunities available to education service providers. In addition to the growth of conventional language schools, advancements in digital technology have also transformed the landscape of the English language learning industry. Various online learning platforms, such as Cakap, English Academy, and Ruangguru, have introduced more flexible and easily accessible learning alternatives for people across Indonesia (Kurniawati et al., 2024; Rahayu & Muamaroh, 2022; Ramadhani & Damayanti, 2023).

The growth in the number of language schools and digital learning platforms has intensified competition in the English language education industry. Service providers are required not only to offer high-quality learning programs but also to provide a learning experience that fosters customer satisfaction and loyalty. In this increasingly competitive environment, service quality has become a critical factor in ensuring the sustainability and performance of these institutions.

ITTR English Course, an English language training institution that has been in operation since 1960 and has extensive experience in providing English language education services, also faces these challenges. Despite its strong reputation and history, ITTR English Course is facing increasing competitive pressure due to changing customer needs and the emergence of various alternative providers of English language learning services. Over the past five years—specifically the 2020–2025 period the institution has shown stagnant profit growth, even though the number of enrolled students has remained relatively stable at around 540 students per year. This situation indicates that a stable student enrollment does not necessarily lead to optimal financial performance.

Furthermore, ITTR English Course failed to meet its revenue target of Rp2.4 billion for the 2024–2025 academic year. This failure to meet the target indicates the presence of issues that require managerial attention, particularly regarding the effectiveness of service strategies, the quality of the learning experience as perceived by customers, and the institution’s ability to retain student loyalty amid increasingly intense competition.



**Figure 1. Student Enrollment Trends 2020-2025**

Source: Primary data, ITTR English Course institutional records (2020–2025)

The enrollment distribution at ITTR English Course between 2020 and 2025 is displayed in Figure 1. Throughout this timeframe, the figures reveal a consistent rise in student registration. The school started with 300 learners in 2020, climbing to 432 in 2021 and 460 in 2022. This positive growth sustained itself into 2023 at 470 individuals, moved up to 500 in 2024, and peaked at 554 participants by 2025. These figures reveal an ongoing development in student numbers that confirms a solid market demand for learning English. Even so, the fact that revenue growth has been somewhat limited in comparison suggests that there could be hidden inefficiencies in financial management and service output, thereby validating the call for targeted reforms in operational systems and service excellence.

In the literature on service management, service quality is often measured using the SERVQUAL model developed by Parasuraman et al. (1988). This model assesses service quality based on five key dimensions: “tangibility (physical aspects), reliability, responsiveness, assurance, and empathy.” SERVQUAL is widely used because it helps organizations identify gaps between customer expectations and the services they receive. Various studies have demonstrated that the SERVQUAL dimensions have a significant influence on customer satisfaction in the education sector. Sibai et al. (2021) found that the assurance and responsiveness dimensions are key factors influencing student satisfaction in higher education. Meanwhile, Sumi et al. (2021) showed that empathy and the physical aspect are dominant factors in fostering satisfaction within online learning environments. Furthermore, Fatmawati et al. (2024) identified reliability and empathy as the most decisive dimensions in enhancing perceptions of service quality at universities. These findings indicate that each SERVQUAL dimension contributes to shaping customer satisfaction, although the degree of influence may vary depending on institutional characteristics and the needs of service users.

Implementing a SERVQUAL analysis at ITTR English Course is an essential and immediate step. Any mismatch between student expectations and actual experiences can jeopardize loyalty, customer satisfaction, and overall financial returns. At the same time,

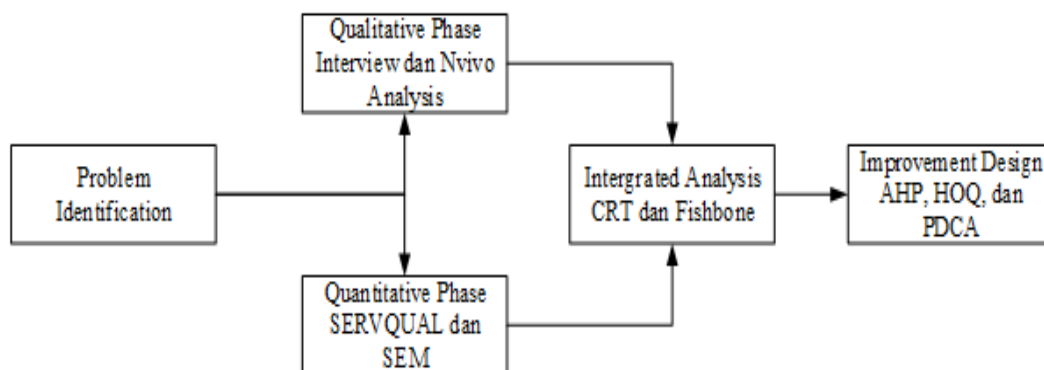
competition from digital education platforms, independent learning tools, and artificial intelligence tutors has redefined the English teaching landscape, pushing standard schools to innovate. By conducting this SERVQUAL assessment, the study seeks to highlight specific weaknesses in service delivery that hamper revenue growth, paving the way for strategic adjustments that ensure sustainable financial success.

This inquiry aims to deliver valuable insights on both theoretical and operational levels. Theoretically, it adds to the evolution of service management literature, particularly by testing the SERVQUAL model in an educational setting. Furthermore, by blending qualitative and quantitative analysis in a sequential exploratory mixed-methods design, this research deepens the academic understanding of service quality metrics and their direct consequences on consumer satisfaction and retention in the English education marketplace. From a functional standpoint, the research insights provide the management team at ITTR English Course with specific action plans to improve teaching staff skills, training environments, and service agility, thereby driving continuous revenue development. The investigation also serves as a useful benchmark for other English language centers navigating intense competition in the fluid Indonesian education landscape, assisting them in refining service quality and reinforcing their market presence.

## METHOD

The study utilizes a sequential exploratory mixed-methods framework, meaning that qualitative data collection and interpretation precede the quantitative stage. The rationale for this approach rests on the desire to initially investigate and clarify the deeper situational and institutional dynamics impacting service quality at ITTR English Course, followed by an empirical phase to measure the prevalence of these factors across the wider student body. Creswell and Plano Clark (2018) state that a sequential exploratory mixed-methods design is ideal for situations where qualitative discoveries are utilized to build and refine quantitative survey instruments, conceptual models, or testing variables.

Starting with a qualitative investigation ensures that the subsequent quantitative stage is rooted in real-world experiences and stakeholder viewpoints instead of depending entirely on preset hypotheses. This methodology improves the situational validity and functional value of the final results, especially within service-focused academic facilities where the caliber of service is determined by intricate dynamics between staff, operational infrastructure, and institutional workflows.



**Figure 2. Research Design**

Source: Research design framework developed by the author based on Creswell & Plano Clark (2018)

Figure 2 displays the complete methodology sequence applied throughout this project. This process commences with a qualitative analysis to uncover service quality dilemmas and their core drivers, followed by a quantitative phase that quantifies service quality metrics and evaluates the structural associations among the selected variables. Data from both steps are later synthesized to develop systematic and durable strategies for optimizing service delivery.

The qualitative portion of this study is designed to pinpoint primary service quality deficiencies and investigate the underlying drivers of operational gaps at ITTR English Course. Qualitative research materials are assembled using detailed interviews and open-ended questionnaires with major internal actors, specifically the management team, instructors, and office staff. By using NVivo software to evaluate this data, the study maps out repeating patterns, core themes, and links among elements like human resources, facilities, technological infrastructure, internal alignment, and delivery methods. These discoveries provide the necessary conceptual framework to outline the variables, metrics, and hypotheses for the following quantitative analysis.

Constructed around the qualitative results, the quantitative phase of the research seeks to impartially evaluate service quality from the viewpoint of the students and test how it affects their satisfaction and brand loyalty. The information is collected using a systematic questionnaire designed around both the qualitative field data and the SERVQUAL theoretical architecture. This evaluation relies on the five core SERVQUAL dimensions outlined by Parasuraman, Zeithaml, and Berry (1988): “tangibles, reliability, responsiveness, assurance, and empathy”. Additionally, Structural Equation Modeling (SEM) is applied to evaluate the causal connections between service quality, student satisfaction, and student loyalty. This statistical method allows for the concurrent assessment of several hidden variables and delivers strong empirical validation concerning the specific impact of each individual service quality dimension.

In the concluding phase, discoveries from both the qualitative and quantitative tracks are merged to form concrete strategies for enhancing service. This integration relies on several structured, decision-focused analytical frameworks, including the Fishbone Diagram and Current Reality Tree (CRT) for core problem identification, the Analytic Hierarchy Process (AHP) for determining the priority of various solutions, and the House of Quality (HOQ) to align student expectations with technical operational updates. Following this, the Plan–Do–Check–Action (PDCA) methodology serves as an ongoing management loop to make sure the proposed steps are put into practice systematically, measurably, and viably over time.

Through the execution of a sequential exploratory mixed-methods strategy, this investigation succeeds in uncovering a detailed view of the service quality challenges at ITTR English Course while producing evidence-based and tactical proposals. These recommendations are designed to optimize learner satisfaction, encourage student retention, and reinforce the enduring viability of the facility.

### **Data Collection Method**

This study gathers both quantitative and qualitative data. The quantitative phase involves surveying 200 active ITTR English Course students using a five-point Likert scale questionnaire based on adapted SERVQUAL metrics, satisfaction, and loyalty, with data validated through Confirmatory Factor Analysis. For the qualitative phase, open-ended surveys

and semi-structured interviews are conducted with students, teachers, and staff to capture service experiences and operational difficulties, which are then processed using NVivo.

### **Data Analysis Method**

Descriptive statistics first outline respondent profiles and service trends, after which CFA and SEM evaluate how service quality affects satisfaction and loyalty based on model fit indices. The quantitative data is then merged with qualitative findings through CRT and Fishbone analyses to pinpoint core operational defects. These challenges are prioritized via AHP, translated into operational requirements using the House of Quality, and organized into an implementation roadmap governed by the PDCA cycle.

## **RESULT AND DISCUSSION**

### **Analysis**

This part covers the data analysis findings focused on pinpointing service quality challenges and key improvement targets at ITTR English Course. The evaluation is carried out in consecutive steps, which are detailed below.

#### **Qualitative Analysis (NVivo)**

Data for the qualitative portion of this project came from open-ended survey questions and were evaluated using NVivo software. The textual feedback was organized through a systematic coding process into major thematic nodes that reflected common viewpoints and patterns. As shown in Table 1, the evaluation brought forward three primary nodes.

**Table 1.** Frequency of Nodes

No.	Node	Reference Frequency
1	Human Resources and Competency	11
2	Facilities and Infrastructure	6
3	Environment and Comfort	2

Source: Primary data, NVivo qualitative analysis results from open-ended questionnaire responses (2026)

According to the data in Table 1, the NVivo evaluation of qualitative feedback from internal stakeholders at ITTR English Course highlights three major themes. The category covering “Human Resources and Competency” shows the highest number of mentions, showing that participants are deeply concerned about differences in teacher skills, the necessity of ongoing training, steady educational quality, and the professionalism of staff when helping students. To illustrate this point, a participant noted that “consistent training for instructors is vital to guarantee uniform and professional teaching practices.”

Ranking as the second most frequent theme is the “Facilities and Infrastructure” node, which focuses on challenges regarding classroom comfort, AC units, Wi-Fi reliability, and the overall sufficiency of educational resources. This was underscored by a participant who remarked that “certain classrooms remain uncomfortable, particularly regarding the cooling systems and internet access.”

Even though the “Environment and Comfort” node shows a lower number of mentions, it is still significant because it covers cleanliness, tidiness, and the general educational climate. This was pointed out by a participant who observed that “the surroundings are mostly fine, but keeping things clean requires extra effort during busy times.”

According to the NVivo analysis, essential service quality challenges are apparent to both students and internal stakeholders at ITTR English Course. The primary themes involve staff capabilities, accessible infrastructure, and a pleasant educational setting. This qualitative feedback offers a necessary baseline to map out core issues before conducting subsequent quantitative evaluations.

Based on the NVivo qualitative findings, ITTR's main vulnerabilities relate to the service journey students experience throughout their education, rather than issues with student enrollment. The highest-frequency nodes draw attention to a lack of uniform teaching quality, sluggish administrative response times, and campus infrastructure that does not entirely reinforce a productive learning atmosphere. These findings indicate that although educational services are being delivered, ITTR falls short of ensuring a steady, high-caliber service experience at all student touchpoints. To illustrate, some participants noted that the standard of education varies greatly depending on who is teaching, causing an inconsistent learning journey. Additionally, administrative tasks such as schedule adjustments, course notifications, and handling complaints were viewed as slow, thereby lowering student confidence in the institution's professionalism.

### Quantitative Analysis (SEM–AMOS)

The second analytical phase uses AMOS 25 for Structural Equation Modeling, building on the initial NVivo framework. SEM is ideal here because it simultaneously examines measurement and structural relationships to assess model fit and reliability (Hair et al., 2019). This suits service quality studies based on multiple dimensions like tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). To map participant views, descriptive statistics including means, ranges, and standard deviations were calculated first, with results for the 200 respondents displayed in Table 2.

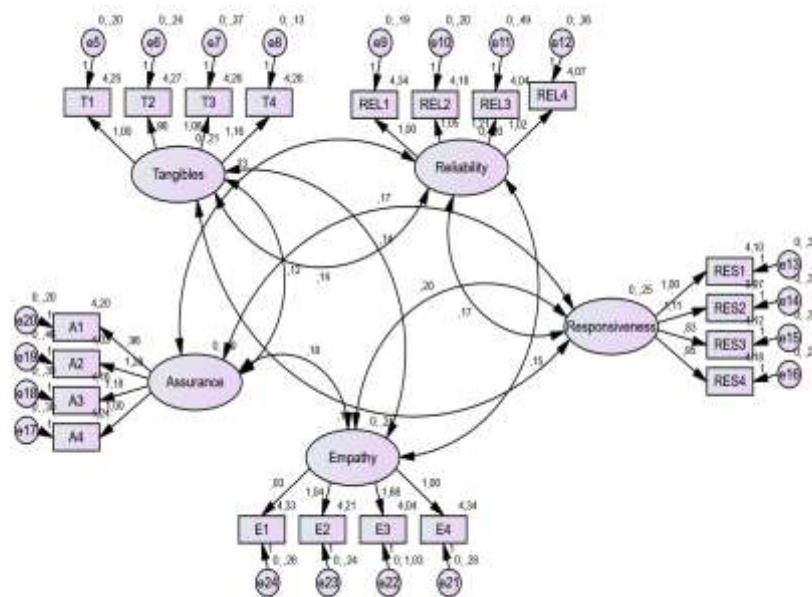
**Table 2.** Descriptive Statistical Analysis

Indicator	Minimum	Maximum	Mean	Std. Deviation	Category
T1	2.00	5.00	4.245	0.646	Very High
T2	2.00	5.00	4.270	0.632	Very High
T3	1.00	5.00	4.260	0.785	Very High
T4	2.00	5.00	4.275	0.649	Very High
REL1	2.00	5.00	4.335	0.628	Very High
REL2	1.00	5.00	4.180	0.656	High
REL3	1.00	5.00	4.040	0.890	High
REL4	1.00	5.00	4.065	0.757	High
RES1	1.00	5.00	4.095	0.793	High
RES2	1.00	5.00	3.970	0.826	High
RES3	1.00	5.00	4.115	0.696	High
RES4	1.00	5.00	4.175	0.705	High
A1	2.00	5.00	4.200	0.618	High
A2	1.00	5.00	4.030	0.879	High
A3	1.00	5.00	4.160	0.811	High
A4	1.00	5.00	4.235	0.702	Very High
E1	2.00	5.00	4.330	0.666	Very High

E2	1.00	5.00	4.205	0.682	High
E3	1.00	5.00	4.040	1.275	High
E4	1.00	5.00	4.340	0.705	Very High

Source: Primary data, descriptive statistical analysis results from SERVQUAL-based questionnaire responses (n=200, 2026)

According to Sugiyono's (2019) classification, scores signify high (3.41–4.20) or very high (4.21–5.00) performance. The results reflect strong positive perceptions, with tangibles, reliability, and empathy scoring very high, while remaining aspects scored high, showing exactly where service can be enhanced. The descriptive results confirm the data is ready for causal testing through structural equation modeling. The subsequent phase applies confirmatory factor analysis to verify the validity and reliability of the servqual indicators prior to further evaluation.



**Figure 3.** Confirmatory Factor Analysis (CFA) Model

Source: Primary data, CFA model estimation results using AMOS 25 software based on survey data (2026)

Figure 3 displays the Confirmatory Factor Analysis (CFA) results for the five service quality constructs. Because all factor loadings exceed 0.50, the indicators validly represent their latent variables. The covariance paths illustrate the relationships between dimensions, and the overall convergent validity confirms that no indicators need to be removed.

To establish a measurement model with strong explanatory power, confirmatory factor analysis evaluates how indicators represent their latent constructs. The resulting amos standardized regression weights are presented in Table 3, serving as the validation baseline before proceeding to the structural model analysis.

**Table 3.** Standardized Regression Weights

Latent Variable	Indicator	Standardized Loading	Remarks
Tangibles	T1	0.718	Valid

	T2	0.634	Valid
	T3	0.625	Valid
	T4	0.827	Valid
Reliability	REL1	0.721	Valid
	REL2	0.723	Valid
	REL3	0.616	Valid
	REL4	0.610	Valid
Responsiveness	RES1	0.634	Valid
	RES2	0.677	Valid
	RES3	0.602	Valid
	RES4	0.677	Valid
Assurance	A4	0.622	Valid
	A3	0.636	Valid
	A2	0.636	Valid
	A1	0.679	Valid
Empathy	E4	0.652	Valid
	E3	0.604	Valid
	E2	0.701	Valid
	E1	0.646	Valid

Source: Primary data, confirmatory factor analysis (CFA) results using AMOS 25 software based on survey data (2026)

Based on Table IV.3, every indicator achieved a factor loading above 0.50. According to Hair et al. (2019), values past this minimum threshold demonstrate adequate convergent validity and reliability. The results verify that all indicators are valid representations of their constructs, so none were eliminated.

In Table 3, indicator T4 leads the tangibles construct with a 0.827 loading, while REL2 dominates reliability at 0.723, highlighting consistency. All responsiveness indicators exceed 0.60, proving reliable measurement. The assurance and empathy constructs also show acceptable convergent validity, led by indicator E2 at 0.701 in empathy.

These results confirm that the measurement model achieves convergent validity and can proceed to structural model analysis (Hair et al., 2019). To double-check construct reliability and further validate convergence, Construct Reliability and Average Variance Extracted were also calculated. The next section outlines these findings for the Tangibles construct.

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + \sum (1 - \lambda_i^2)} = \frac{(7,862)^2}{(7,862)^2 + \sum (2,007)} = 0,797$$

$$AVE = \frac{(\sum \lambda_i)^2}{n} = \frac{(1,993)^2}{4} = 0,498$$

The calculations were performed for each specific construct.

**Table 4. Summary of AVE and CR**

Variable	AVE	CR	Remarks
Tangibles	0.498	0.797	Valid & Reliable

Reliability	0.449	0.764	Reliable
Responsiveness	0.420	0.743	Reliable
Assurance	0.414	0.739	Reliable
Empathy	0.425	0.746	Reliable

Source: Primary data, construct reliability and convergent validity calculation results (2026)

The data in Table 4 indicates that every remaining construct surpasses the recommended 0.70 threshold for Composite Reliability (CR), establishing sufficient internal consistency. While some Average Variance Extracted (AVE) metrics are marginally under 0.50, this remains acceptable because the CR requirements are fulfilled, following the guidelines of Hair et al. (2019). Therefore, the validity and reliability of the measurement model are confirmed.

### Model Goodness-of-Fit Evaluation

**Table 5.** Goodness of Fit (GoF),

Fit Index	Cut-off Value	Result	Interpretation
CMIN/DF	≤ 3.00	2.006	Good Fit
NFI	≥ 0.90	0.808	Marginal Fit
RFI	≥ 0.90	0.772	Marginal Fit
IFI	≥ 0.90	0.893	Marginal Fit
TLI	≥ 0.90	0.871	Marginal Fit
CFI	≥ 0.90	0.891	Marginal Fit
RMSEA	≤ 0.08	0.071	Good Fit

Source: Primary data, goodness-of-fit indices from SEM analysis using AMOS 25 software (2026)

Table 5 outlines the model fit analysis, showing a CMIN/DF value of 2.006 that meets the acceptable criteria of being between 1 and 3, thereby demonstrating a sufficient fit. Additionally, the RMSEA of 0.071 is beneath the 0.08 threshold, which means the approximation error is reasonable and the overall fit is good. While the NFI, RFI, IFI, TLI, and CFI scores are marginally lower than the advised 0.90 level, they are near enough to represent a marginal fit, which remains acceptable given the large sample size and complexity of the model.

Ultimately, the measurement model is judged acceptable for the next phase of analysis. The SEM analysis demonstrates that student satisfaction is most strongly shaped by the service quality dimensions of reliability and assurance, and this satisfaction heavily guides student loyalty to ITTR. Students expect dependable service and proficient teachers, so when disruptions like scheduling changes or fluctuating instructional quality occur, satisfaction falls even if they do not drop out. This explains the suboptimal levels of student loyalty, which helps explain the flatlined growth in profits.

### Current Reality Tree (CRT)

To identify which issues to prioritize, this study looks at the metrics with the lowest average scores, which reveal performance deficiencies and areas where respondents feel the service is lacking. This technique follows the Importance-Performance Analysis model established by Martilla and James (1977), which argues that attributes with weak performance must be improved first because they negatively impact how overall quality is perceived.

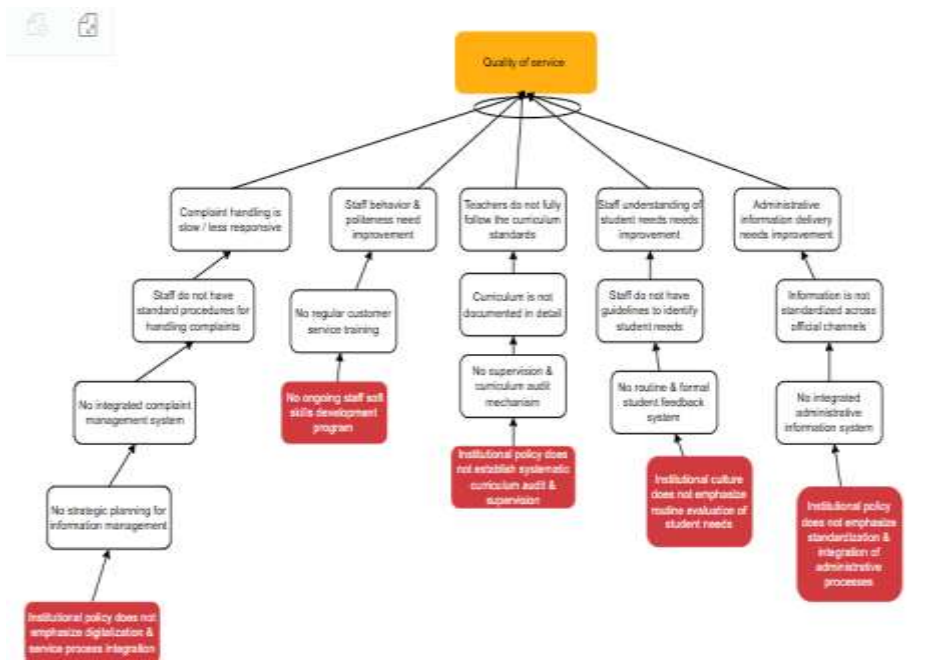
Moreover, Sugiyono (2019) maintains that in descriptive studies using Likert scales, evaluating mean values across different indicators serves to highlight features that need urgent enhancement, with lower means representing poorer perceived performance. This perspective aligns with Parasuraman et al. (1988), who establish that the service quality domains or individual indicators with the lowest evaluations indicate where service delivery has not fully matched user expectations, marking them as essential targets for troubleshooting and prioritization.

**Table 6.** Problem Categorization

<b>Problem Rank</b>	<b>Problem Statement</b>	<b>Mean</b>	<b>Category</b>
1	The process for managing complaints at ITTR English Course is currently lacking speed and responsiveness	3.970	Very High
2	Staff members do not maintain a uniform standard of hospitality and politeness toward every student	4.030	High
3	Faculty members do not maintain a steady or uniform compliance with the prescribed curriculum standards	4.040	High
4	The personnel struggle to fully comprehend the specific personal demands of each student	4.040	High
5	Students do not always receive straightforward and correct information from the administration	4.065	High
6	Students do not always experience quick or immediate responses to their questions from the staff	4.095	High
7	Instructors do not always step in to help students who face academic challenges	4.115	Moderate
8	The institution experiences periodic inconsistencies and delays in its daily course scheduling	4.180	Moderate

Source: Primary data, problem categorization based on descriptive statistical analysis of SERVQUAL indicators (2026)

Table 6 summarizes the mean scores for every service quality indicator at ITTR English Course, showing that most parameters fall into the high or very high ranges, which signals that respondents generally view the service favorably. Nevertheless, when comparing the items against one another, a few indicators stand out with lower relative mean scores, making them key areas of concern. This group consists of RES2 (3.970), A2 (4.030), REL3 (4.040), E3 (4.040), and REL4 (4.065). Even though these numbers are still favorable, their weaker performance relative to the other metrics indicates elements of the service that are underperforming, which designates them as priority areas for intervention to boost total satisfaction and perceived quality (Zeithaml, Bitner, & Gremler, 2018).



**Figure 4. Current Reality Tree (CRT)**

Source: Research analysis, constructed based on NVivo qualitative findings and problem identification (2026)

As illustrated in Figure 4, deficient institutional policies concerning digitalization, administrative benchmarks, and curriculum assessment serve as the primary sources driving a sequence of organizational failures. The lack of a strategic framework for managing information, combined with minimal investment in employee soft skills training, leads to an isolated complaint management structure and unprofessional service delivery. These underlying problems soon manifest as operational hurdles, including a lack of uniform procedures and erratic communication. In the end, these setbacks culminate in the central challenges faced by the institution, which are delayed complaint resolution and a drop in overall service quality.

According to the Current Reality Tree (CRT) evaluation, the diverse challenges facing ITTR, such as unstable student satisfaction, poor loyalty, and the inability to hit revenue goals, are mutually dependent and trace back to the same fundamental issue: the absence of a systematically maintained and standardized service quality setup. This CRT map explains how variations in educational delivery, narrow service frameworks, and loose oversight processes spark multiple negative side effects that directly weaken corporate outcomes. As an example, failing to establish distinct and quantifiable standards for instructor performance results in inconsistent learning experiences, which damages student satisfaction and reduces future enrollment in advanced modules. In the long run, these interconnected difficulties join together to cause ITTR's revenue gap.

### Root Cause Analysis (Fishbone Diagram)

After pinning down the core problems using the Current Reality Tree (CRT), a more thorough investigation into the driving factors is carried out with a Fishbone Diagram (Ishikawa Diagram). This step is intended to systematically lay out the cause-and-effect

connections so the organization can pinpoint the foundational reasons behind dropping student loyalty and flatlining profits.

According to Ishikawa (1986), the cause-and-effect diagram, frequently called the Fishbone Diagram, serves as an analytical instrument to discover, analyze, and visually map out all the probable causes behind a distinct issue. The framework sorts these suspected causes into primary groups including Man, Machine, Method, Material, and Process to lay bare the sources of operational variation or failure. Gaspersz (2012) reinforces this by stating that the method is highly valuable for organizations because it structures problems visually and guides the development of focused solutions.

### Weighting Criteria Using AHP

Saaty (1990) explains that the Analytic Hierarchy Process (AHP) is an analytical decision framework designed to tackle multifaceted dilemmas by organizing them systematically into a hierarchy of main goals, criteria, sub-criteria, and actionable alternatives.

**Table 7. AHP Criteria and Sub-Criteria**

Criteria Code	Criteria (Core Problems)	Sub-Code	Sub-Criteria (Solutions)
C1	The system for addressing complaints operates at a sluggish and less responsive pace	C1S1	Formulate a structured protocol for resolving student complaints
		C1S2	Introduce an all-in-one complaint management infrastructure
		C1S3	Conduct service recovery and conflict management workshops for the workforce
		C1S4	Formulate a long-term strategy for corporate data and information control
C2	Staff members need to improve their professional demeanor and manners toward others	C2S1	Deliver professional service excellence training for the workforce
		C2S2	Maintain a regular learning program for employee relational and emotional intelligence
		C2S3	Connect professional appraisals to measurable customer care behavior
C3	The teaching staff does not maintain continuous alignment with required educational standards	C3S1	Create comprehensive and thorough guides for the academic curriculum
		C3S2	Set up academic oversight protocols and structured curriculum checking routines
		C3S3	Conduct teacher workshops focused on maintaining alignment with course standards
C4	The institution needs to improve the staff's ability to identify and address student concerns	C4S1	Create standard criteria to help educators recognize individual student requirements

		C4S2	Set up systematic and structured feedback mechanisms across the student body
C5	The institution should focus on enhancing the accuracy and flow of administrative communications	C5S1	Establish consistent protocols for all authorized communication platforms
		C5S2	Launch a centralized operational software system for all administrative records

Source: Research analysis, derived from NVivo qualitative findings and SERVQUAL gap identification (2026)

Table 7 outlines the central service challenges at ITTR English Course alongside their respective solution sub-criteria, establishing an organized framework to develop the AHP hierarchy. This foundational structure comprises five main service issues as the primary criteria: slow response times for complaints, staff etiquette and helpfulness, teachers following standardized curricula, employee comprehension of student demands, and the distribution of administrative updates. A set of practical and relevant solution alternatives supports each criterion, spanning from the design of standard operating procedures and integrated data systems to employee workshops and communication standards. With this well-defined multi-level system of criteria and sub-criteria in place, the next step is to draw the AHP hierarchical diagram to weigh and prioritize solutions mathematically and systematically.

**Table 8. Priority Weights – Level 1**

Criteria	C1	C2	C3	C4	C5	Weight
C1	0.11	0.03	0.07	0.07	0.13	0.08
C2	0.45	0.11	0.04	0.12	0.04	0.15
C3	0.17	0.29	0.11	0.18	0.04	0.16
C4	0.17	0.10	0.07	0.11	0.10	0.11
C5	0.10	0.28	0.33	0.12	0.11	0.19

Source: Primary data, AHP pairwise comparison and priority weight calculation results using Expert Choice software (2026)

Table 8 lists the normalized priority weights across all primary criteria at Level 1. The numbers show that C5 (Administrative information delivery needs improvement, 0.19) and C3 (Teachers do not fully follow curriculum standards, 0.16) hold the dominant weights, proving that these problems have the most significant effect on the central target. Though C1 (Complaint handling is slow, 0.08) stands out with the lowest priority value, it continues to be a meaningful contributor to the full framework.

**Table 9. Priority Weights – Level 2**

Sub-Criteria	Local Weights
C1S1	0,11
C1S2	0,20
C1S3	0,22
C1S4	0,21
Sub-Criteria	Local Weights
C2S1	0,192
C2S2	0,587

C2S3	0,145
Sub-Criteria	Local Weights
C3S1	0,079
C3S2	0,204
C3S3	0,319
Sub-Criteria	Local Weights
C4S1	0,244
C4S2	0,500
Sub-Criteria	Local Weights
C5S1	0,417
C5S2	0,500

Source: Primary data, AHP pairwise comparison and local priority weight calculation results using Expert Choice software (2026)

As shown in Table 9, the local priority weights for all sub-criteria are organized by their respective main criteria. The highest-weighted sub-criteria indicate which interventions are considered the highest priority. For example, under the C1 umbrella, C1S3 (Complaint Management Training) is recognized as the chief solution, and under C2, C2S2 (Soft Skills Development Program) comes out on top. Similarly, C3S3 (Teacher Professional Development), C4S2 (Routine Student Feedback System), and C5S2 (Integrated Administrative Information System) are named the most crucial solutions inside their particular categories. These local weight values are later utilized to establish the global priority weights.

Furthermore, because C2S2 (Soft Skills Development Program) and C4S2 (Routine Formal Student Feedback System) achieve prominent global weights, personnel soft skills development and a structured system for student feedback are established as the second and third priority actions. Although the remaining sub-criteria show lower global scores, they stay relevant as essential features of a total service refinement strategy. Ultimately, the global weight results supply an objective, quantitative tool for managers as they chart the implementation order of these quality-improving solutions.

### **Service Improvement Strategy Using HOQ**

The goal of this phase is to ensure that each student requirement found is systematically translated into measurable, actionable technical specifications inside ITTR English Course. By utilizing the House of Quality (HOQ) framework, the organization can align customer preferences with institutional capabilities, creating a stronger bond between service expectations and development initiatives. The upcoming section outlines the recommended HOQ blueprint built around the prioritized solutions derived from the AHP analysis.

This section focuses on the House of Quality (HoQ) matrix, an analytical tool that merges customer needs with the technical responses of the organization to draft measurable, actionable plans for service quality refinement. This matrix maps the direct links between core service traits and potential technical adjustments, making it possible to isolate priority upgrade strategies through technical importance weighting. These designated priorities point to the most vital operational steps for immediate deployment, aimed at lifting service delivery standards and keeping institutional resources synchronized with student expectations.

The correlation analysis shows that the standardization of administrative documents is the primary priority, securing a technical importance weight of 87. The second highest priority

is the design of a structured feedback mechanism for students, which scores 70. Additionally, setting up a unified administrative IT platform and enforcing mandatory teacher training are flagged as vital operational goals, each finishing with a score of 67 due to their tight connection with faster and more efficient service delivery.

The benchmarking data at the bottom of the matrix maps out where ITTR English Course (Homie English) stands in comparison to other providers. This assessment gives management the necessary insights to establish both high-reaching and realistic operational targets, ultimately helping the institution secure a stronger competitive advantage in the education industry.

## CONCLUSION

Based on the data from the mixed-method qualitative and quantitative evaluations, several key deductions help resolve the core research objectives and questions. First, the main service quality discrepancies felt by students at ITTR English Course exist in the dimensions of empathy, reliability, assurance, and responsiveness. These issues manifest through delayed complaint management, unpredictable employee behavior, confusing or erratic administrative announcements, restricted staff insight into what students need, and instructors who fail to match curriculum benchmarks consistently. The qualitative analysis using NVivo shows that these problems are tightly linked to staff skills, office systems, and backup service facilities. These drops in service quality end up hurting the school's profits by lowering student satisfaction and loyalty, increasing the chances that students will drop out, and stopping the enrollment from growing through personal recommendations.

Second, the outputs from the Structural Equation Modeling (SEM–AMOS) analysis reveal that every single SERVQUAL dimension has a meaningful effect on student satisfaction and loyalty. That said, the areas with the most powerful impact are those tied to service reliability and assurance, especially when it comes to the transparency of administrative details and how consistently instructors deliver the curriculum. These discoveries are backed up by the AHP analysis, which shows that weaknesses in sharing administrative information and teachers following curriculum guidelines get the highest priority scores. This reveals that students care deeply about service predictability, professional behavior, and steady academic standards when forming their satisfaction and loyalty toward ITTR English Course.

Third, the analysis indicates that structured service quality interventions assist ITTR English Course in meeting its gross revenue benchmark of IDR 2,400,000,000 for the 2024–2025 academic year. Merging the AHP and House of Quality (HOQ) methodologies reveals that the most critical initiatives consist of launching a centralized administrative IT system, delivering regular soft skills training to the workforce, creating a formal student feedback channel, and supporting ongoing career development for the teaching staff. The deployment of these methods should improve day-to-day operations, stabilize service delivery, and enrich the overall educational journey, which subsequently aids in maximizing student retention, fostering long-term loyalty, and maintaining continuous institutional revenue.

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