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# Aircraft Maintenance Training through the Trainee Lens: Service Evaluation and Strategic Directions for an Aviation School

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**Abstract**

This study evaluated aircraft maintenance trainees' satisfaction with the training program, training personnel, facilities, and customer service at OMNI Aviation Corporation's Maintenance Training Center in Clark Freeport, Pampanga, Philippines. Guided primarily by SERVQUAL, with Equity Theory and Contrast Theory informing interpretation, the study employed a descriptive secondary-data design and strategic analysis. Institutional Training Service Evaluation records from 200 trainees in 2024–2025 were examined using 32 satisfaction statements on a four-point Likert scale. Descriptive statistics, SWOT analysis, and TOWS strategy formulation were applied. All four dimensions received Very Satisfactory overall ratings: training program (M = 3.66), customer service (M = 3.59), training personnel (M = 3.58), and training facilities (M = 3.34). Both the Training to License Program and Maintenance Training Plus received favorable ratings, with differences interpreted descriptively. Comparatively lower ratings concerned training documents, classroom engagement, class-time utilization, staff demeanor, comfort rooms, and locker areas. Strategic analysis identified opportunities for digital instruction and industry partnerships, alongside potential competitive, financial, and site-related risks. The findings indicated high perceived service quality and supported targeted improvements in learning materials, teaching practices, support facilities, and customer service. The study contributed to Sustainable Development Goals 4 (Quality Education) and 8 (Decent Work and Economic Growth) by informing improvements in technical education and workforce preparation. Its sustainability implications centered on institutional service improvement, effective resource allocation, and continued industry-aligned training.

**Keywords:** Aircraft Maintenance Training, Service Quality, Trainee Satisfaction, Training Facilities, SWOT Analysis, Institutional Sustainability

## 1. Introduction

The aviation industry plays an essential role in global transportation, economic development, and professional mobility. The International Air Transport Association (IATA, 2026) reported continued improvements in long-term aviation safety performance while emphasizing the importance of international standards and continuous risk management. Similarly, the International Civil Aviation Organization (ICAO, 2025) highlighted the importance of regulatory compliance, operational competence, and coordinated safety initiatives. Within this environment, aircraft maintenance training remained essential to the preparation of technically competent personnel capable of supporting aircraft airworthiness and operational safety. However, the effectiveness of training institutions depended not only on technical instruction but also on the quality of their programs, personnel, facilities, and customer services. This study assessed the satisfaction of aircraft maintenance trainees at OMNI Aviation Corporation's Maintenance Training Center (MTC) in Clark Freeport, Pampanga. It focused on identifying service

strengths, weaknesses, and opportunities for improvement to support training quality, organizational competitiveness, and institutional sustainability.

Aircraft maintenance involves inspections, repairs, troubleshooting, and preventive activities necessary to maintain aircraft airworthiness and operational reliability. Olaganathan (2024) emphasized that aircraft maintenance required technical accuracy, effective coordination, and careful management of human factors to minimize operational errors. Key et al. (2022) identified organizational conditions, supervision, workplace environments, and personnel-related factors as contributors to procedural noncompliance in aviation maintenance. These findings reinforced the importance of structured technical instruction, appropriate supervision, and practical experience in developing competent maintenance personnel. OMNI Aviation Corporation, established as a flying school in 1993, operated aviation training programs for aspiring pilots, aircraft mechanics, and cabin crew. Its Maintenance Training Center, established in 2017, provided on-the-job training, pre-employment preparation, and professional development opportunities. The center coordinated with OMNI Aviation's Approved Maintenance Organization, where licensed aircraft maintenance personnel supervised trainees during practical maintenance activities. These arrangements allowed trainees to apply theoretical knowledge in an operational aviation environment. Concerns about trainee recruitment and institutional competitiveness highlighted the importance of evaluating service quality and identifying areas for improvement. The study consequently examined trainee satisfaction in relation to the training program, training personnel, facilities, and customer service to identify internal areas requiring organizational improvement.

Service quality is recognized as an important determinant of satisfaction, institutional reputation, and customer loyalty. Dam and Dam (2021) established positive relationships among service quality, brand image, customer satisfaction, and loyalty, demonstrating the importance of consistent service delivery in organizational performance. In educational settings, Toscano-Hernández et al. (2024) identified service quality as a multidimensional concept involving institutional resources, stakeholder expectations, and educational experiences. Bui et al. (2023) likewise reported significant relationships between perceived educational service quality, student satisfaction, and loyalty. These findings indicated that effective training institutions needed to consider both the technical outcomes of instruction and the quality of services experienced by their trainees. Training facilities and equipment were particularly important in aircraft maintenance education because practical competence required direct exposure to aircraft systems, tools, and maintenance procedures. Starr et al. (2024) examined virtual reality applications in aviation maintenance education and emphasized opportunities to strengthen conventional classroom and practical training through technological approaches. In the Philippine context, Dela Peña et al. (2025) identified competency gaps in advanced diagnostics, avionics, composite materials, communication, and teamwork. Their findings emphasized the importance of practical training, curriculum alignment, and stronger industry-academic collaboration. These studies reinforced the relevance of accessible equipment, appropriate learning environments, and meaningful practical experiences to training quality. The effectiveness of training personnel also contributed to the development of technical competence and professional confidence. Kulawiecka (2023) found that instructor expertise, active participation in training, and the quality of instructional materials influenced training effectiveness. Timjerdine et al. (2024) further identified communication, experience, and personnel morale as significant contributors to aircraft maintenance performance. Gunes et al. (2026) developed a competency model emphasizing technical knowledge, human factors, safety orientation, responsibility, and professional adaptability among aircraft maintenance technicians. Similarly, Kes et al. (2025) highlighted the importance of evaluating communication, teamwork, and other transversal competencies through appropriate assessment procedures. Kes et al. (2026) subsequently established performance-based assessment criteria for these competencies, underscoring the need for structured and consistent evaluation. These findings demonstrated that training personnel needed both technical expertise and effective instructional, communication, and supervisory capabilities. Customer service and institutional responsiveness were equally relevant to the overall training experience. Guo et al. (2025) found that reliability, responsiveness, assurance, and empathy positively influenced student learning satisfaction in educational institutions. In the Philippines, Parilla (2026) identified the importance of tangible facilities, assurance, empathy, staff professionalism, and student feedback in shaping institutional reputation. Nguyen et al. (2024) also demonstrated that unmet service expectations could generate negative customer emotions, unfavorable recommendations, and intentions to discontinue patronage. These findings suggested that aviation training providers needed to address trainee concerns promptly, maintain effective communication, and deliver services consistent with their stated commitments. Collectively, the literature supported the evaluation of training programs, training personnel, facilities, and customer service as essential dimensions of trainee satisfaction.

Aircraft maintenance training operates within national and international regulatory frameworks intended to promote technical competence and aviation safety. ICAO (2025) emphasized the role of international standards, regulatory coordination, and continuous safety improvement in civil aviation operations. In the Philippines, the Civil Aviation Authority of the Philippines was responsible for regulating civil aviation activities, while the Commission on Higher Education established policies governing student internship programs. Commission on Higher Education (2017), through Memorandum Order No. 104, provided guidelines for student internships

intended to complement academic instruction with practical knowledge, professional attitudes, and workplace experience in recognized host training establishments. Recent Philippine research also highlighted the importance of aligning aircraft maintenance education with industry requirements. Dela Peña et al. (2025) found that curriculum alignment, standardized practical training, and industry partnerships were important to graduate readiness. At the international level, Kes et al. (2026) emphasized the transition toward competency-based training and assessment, including the evaluation of technical and nontechnical capabilities. These developments established the broader educational and regulatory context for examining the quality of aircraft maintenance training services at OMNI Aviation-MTC.

The study was guided principally by the SERVQUAL model developed by Parasuraman et al. (1988), which described service quality through five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. These concepts provided an interpretive basis for examining the institution's four evaluation areas: training program, training personnel, training facilities, and customer service. The institution-developed questionnaire measured satisfaction with these services, and its scores were therefore treated as service-specific satisfaction ratings rather than formal SERVQUAL expectation-perception gap scores. Equity Theory, advanced by Adams (1965), offered a supplementary perspective on perceived fairness and the value of training services received. Contrast Theory and expectancy-disconfirmation perspectives informed the consideration of expectations and actual service experiences. Schiebler et al. (2026) reported limited empirical support for contrast effects, while Zhang et al. (2022) emphasized the relevance of expectancy-disconfirmation in service evaluations. Nagashima (2026) further explained that customer expectations could change during unfamiliar service experiences. Accordingly, SERVQUAL served as the principal interpretive framework, while Equity Theory and Contrast Theory provided supplementary perspectives rather than directly tested theoretical relationships. The conceptual framework linked the evaluation of training programs, personnel, facilities, and customer service with the identification of organizational strengths, weaknesses, opportunities, and threats. These assessments subsequently informed the formulation of strategic recommendations intended to improve service delivery, trainee satisfaction, and institutional competitiveness.

Existing studies provided substantial evidence concerning aircraft maintenance competencies, service quality, and customer satisfaction. However, the reviewed literature primarily addressed broader aircraft maintenance competencies and educational service quality, leaving an institution-specific research gap concerning trainee satisfaction and service improvement priorities at OMNI Aviation-MTC. Although Dela Peña et al. (2025) examined competency gaps in Philippine aircraft maintenance education, their investigation focused on curriculum alignment and graduate readiness rather than the service satisfaction of trainees within OMNI Aviation-MTC. Likewise, Parilla (2026) assessed student perceptions of institutional services in a broader educational setting, which differed from the specialized operational requirements of aircraft maintenance training. The study therefore sought to address an institution-specific gap by evaluating trainees' perceptions of the training program, training personnel, facilities, and customer service. It also examined trainee characteristics, including gender, age, completed course, college or university attended, and MTC program, and compared satisfaction according to training program. Additionally, the study identified organizational strengths, weaknesses, opportunities, and threats to determine feasible strategies for service improvement. The analysis was limited to existing service evaluations completed by trainees who had participated in OMNI Aviation-MTC programs. Its findings were intended to support evidence-informed management decisions, strengthen training delivery, and guide improvements responsive to trainee expectations.

The study was aligned primarily with Sustainable Development Goal 4 (Quality Education) and Sustainable Development Goal 8 (Decent Work and Economic Growth). The United Nations Department of Economic and Social Affairs (2025) emphasized the importance of quality education, relevant skills development, employment opportunities, and productive economic participation in advancing sustainable development. Within this context, SDG 4 was reflected in the study's emphasis on effective technical instruction, competency development, suitable training facilities, and responsive educational services. Evaluating trainee satisfaction supported the identification of institutional improvements that could strengthen the quality and relevance of practical aviation education. The study also supported the objectives of SDG 8 through its focus on preparing prospective aircraft maintenance personnel for skilled employment and strengthening the service performance of a professional training institution. Improved training delivery and competency development could contribute to workforce readiness, while effective service management could support organizational continuity and economic viability. These connections reflected the study's relevance to educational quality, professional preparation, and sustainable institutional operations.

The study contributed to multidisciplinary sustainability through its relevance to educational, institutional, and socioeconomic development. Educational sustainability involved maintaining quality practical instruction, competent training personnel, appropriate facilities, and consistent learning experiences. The findings of Dela Peña et al. (2025) and Kes et al. (2026) reinforced the importance of competency-based preparation, practical training, and industry-aligned assessment in developing a capable aviation maintenance workforce. Institutional sustainability concerned the capacity of OMNI Aviation-MTC to evaluate and improve its services through trainee

feedback and systematic organizational assessment. Dam and Dam (2021) emphasized the relationship between service quality, customer satisfaction, and loyalty, while Parilla (2026) demonstrated the relevance of student feedback to institutional service improvement. Socioeconomic sustainability was reflected in the potential contribution of improved aviation maintenance training to workforce preparation, professional development, and organizational competitiveness. By examining these interconnected dimensions, the study provided a basis for practical improvements that could support trainee satisfaction, institutional continuity, and the long-term delivery of quality aircraft maintenance training.

## 2. Materials and Methods

### 2.1 Research Design

The study employed a descriptive research design using secondary quantitative data and strategic improvement analysis. Existing Training Service Evaluation responses were examined to describe aircraft maintenance trainees' satisfaction with the training program, training personnel, facilities, and customer service at OMNI Aviation-MTC. Descriptive statistical analysis summarized satisfaction ratings and differences between the institution's training programs, while SWOT analysis identified organizational strengths, weaknesses, opportunities, and threats. The findings subsequently informed TOWS strategy formulation to develop proposed service improvements. Cronemyr and Huge-Brodin (2024) emphasized the practical value of action research in addressing organizational concerns and supporting institutional improvement. Consistent with this improvement-oriented perspective, the study focused on evaluating existing conditions and proposing strategies for subsequent organizational implementation and assessment. The design therefore supported evidence-informed decision-making without claiming the completed implementation and evaluation of an action research intervention.

### 2.2 Locale of the Study

The study was conducted at OMNI Aviation Corporation's Maintenance Training Center in Clark Freeport, Pampanga, Philippines. The center provided on-the-job training and professional development programs for aspiring and practicing aircraft maintenance personnel. Training activities involved classroom instruction and supervised practical maintenance operations conducted in coordination with OMNI Aviation's Approved Maintenance Organization. The study covered training services implemented during 2024 and 2025, which reflected revised training programs introduced following the early post-pandemic period. These programs included updated syllabi, training procedures, instructional schemes, schedules, and related operational components.

### 2.3 Respondents of the Study

The study included 200 aircraft maintenance trainees who participated in OMNI Aviation-MTC training programs during 2024 and 2025 and completed the institution's Training Service Evaluation. Their responses provided information on satisfaction with the training program, training personnel, facilities, and customer service. The trainees were described according to gender, age, completed course, college or university attended, and MTC program. Their evaluations served as the basis for assessing satisfaction levels and comparing service experiences across the center's training programs.

### 2.4 Sample and Sampling Procedure

The study utilized secondary data consisting of 200 trainee evaluation records obtained from OMNI Aviation-MTC's existing Training Service Evaluation database for 2024 and 2025. The institution provided the evaluation records used for analysis, allowing the researcher to examine previously collected responses without recruiting additional participants. According to the MTC Student Affairs Office, the 2025 training evaluations had been compiled by January 2026. Kelly et al. (2024) explained that secondary data analysis involved using previously collected information to address research questions. Accordingly, the institutional records served as the analytical sample for evaluating satisfaction across the four service dimensions and comparing the experiences of trainees enrolled in the center's training programs.

### 2.5 Research Instrument

The study utilized the existing Training Service Evaluation questionnaire developed by OMNI Aviation-MTC in 2017 and subsequently revised to maintain its relevance to institutional training services. The instrument was administered by the MTC Student Affairs Office during the midpoint of each training program. It consisted of five sections covering demographic characteristics, training program, training personnel, training facilities, and customer service. The demographic section contained five items concerning gender, age, completed course, educational institution attended, and MTC program. The remaining sections comprised 32 closed-ended statements designed to assess trainees' perceptions and satisfaction with the services received. The institutional questionnaire was conceptually aligned with the SERVQUAL framework for interpreting service quality. Training program and training personnel were primarily associated with reliability and assurance, training facilities with tangibles, and customer service with responsiveness and empathy. A four-point Likert scale was used to measure trainee satisfaction, with numerical values of 4 for Very Satisfactory, 3 for Satisfactory, 2 for Unsatisfactory, and

1 for Very Unsatisfactory. Mean scores were interpreted using four equal-width intervals: above 3.25 to 4.00 for Very Satisfactory, above 2.50 to 3.25 for Satisfactory, above 1.75 to 2.50 for Unsatisfactory, and 1.00 to 1.75 for Very Unsatisfactory. These interpretations were consistently applied across the four service dimensions.

### 2.6 Data Gathering Procedure

The researcher obtained authorization from OMNI Aviation Corporation management through a formal written request addressed to the company president and vice president. Following institutional approval, the researcher accessed the existing training service evaluations collected and maintained by the MTC Student Affairs Office. The study relied exclusively on secondary data, and the researcher did not directly administer the questionnaire to the trainees. The institution administered the Training Service Evaluation through Google Forms during the midpoint of each training program. Evaluation links were distributed according to the schedules of the respective training batches, and trainees were required to complete the assessment. The forms remained accessible for one week or until all trainees within the batch had submitted their responses, whichever occurred first. Designated MTC personnel subsequently compiled the responses using Google Sheets. The researcher obtained access to these institutional records and consolidated the information for analysis. The collected information was used exclusively for academic purposes and handled confidentially in accordance with Republic Act No. 10173, or the Data Privacy Act of 2012. The consolidated data were securely stored during the research, and the researcher retained responsibility for their eventual permanent deletion.

### 2.7 Data Analysis Techniques

The study employed descriptive statistics, SWOT analysis, and TOWS strategy formulation to evaluate trainee satisfaction and develop proposed institutional improvements. Descriptive statistics were used to summarize the respondents' demographic characteristics and their evaluations of the training program, training personnel, facilities, and customer service. Alabi and Bukola (2023) emphasized the importance of descriptive statistics in organizing, summarizing, and interpreting quantitative research data. Similarly, Green et al. (2022) explained that descriptive statistical techniques supported the interpretation of categorical and numerical data through measures of frequency, central tendency, and variability. Frequency counts and relative frequencies were used to describe respondents' demographic characteristics and response distributions. Mean scores, standard deviations, and highest and lowest values were used to summarize and compare satisfaction ratings across the four service dimensions and MTC programs. The computed means were interpreted according to the predetermined four-point satisfaction scale. SWOT analysis was applied to synthesize the satisfaction findings into organizational strengths and areas for improvement, while published industry information provided context for potential external opportunities and threats. Devi et al. (2022) emphasized the usefulness of SWOT analysis in examining organizational conditions and developing competitive strategies. The resulting findings informed TOWS strategy formulation through strength-opportunity, weakness-opportunity, strength-threat, and weakness-threat considerations. These combinations provided the basis for proposed improvements in instructional delivery, training facilities, customer service, industry collaboration, and institutional competitiveness. The resulting strategies represented recommendations for institutional consideration rather than interventions whose effectiveness had already been evaluated.

### 2.8 Ethical Considerations

The study adhered to established ethical research principles and institutional requirements. Authorization to access and analyze secondary evaluation data was obtained from OMNI Aviation Corporation management, and approval was secured from the Holy Angel University Institutional Review Board before the analysis and use of the records. The researcher ensured that the information obtained was authentic, accurately represented, and used exclusively for the approved academic purpose. The confidentiality and security of institutional records and trainee responses were maintained in accordance with the Data Privacy Act of 2012 (Republic Act No. 10173) and its implementing rules and regulations. The researcher observed the applicable institutional policies and assumed responsibility for protecting the rights and interests of OMNI Aviation and the respondents. The study was conducted independently without external sponsorship or financial assistance, and the researcher declared no conflicts of interest. The researcher remained accountable for data management, analysis, interpretation, and compliance with ethical standards throughout the study.

## 3. Results and Discussion

### 3.1 Demographic and Academic Profiles of Aircraft Maintenance Trainees

#### 3.1.1 Gender and Age Distribution of Trainees

Of the 200 trainees, 153 (76.50%) were male, while 47 (23.50%) were female. Regarding age, the largest proportion belonged to the 21–23 age group, comprising 107 respondents (53.50%), followed by 51 (25.50%) aged 18–20, 34 (17.00%) aged 24–26, and eight (4.00%) aged 27 years and above. The mean age was 21.92 years (SD = 2.20), with ages ranging from 18 to 33 years. The findings indicated that OMNI Aviation-MTC primarily accommodated male trainees and young adults preparing to enter the aviation maintenance profession. Although male participation predominated, female trainees were also represented. The concentration of respondents within

the younger age groups reflected the center's role in providing practical training and professional preparation during the early stages of career development.

#### 3.1.2 Educational Background and Institutions Attended

Most trainees completed an Associate in Aircraft Maintenance Technology, comprising 124 respondents (62.00%), followed by 54 (27.00%) who graduated with a Bachelor of Science in Aircraft Maintenance Technology. Meanwhile, 18 trainees (9.00%) completed an Associate in Aircraft Electronics Technology, and four (2.00%) graduated with a Bachelor of Science in Aircraft Electronics Technology. Regarding educational institutions, 108 trainees (54.00%) attended the Asian College of Aeronautics, 32 (16.00%) attended the Philippine State College of Aeronautics, and 13 (6.50%) attended JOCSON College Inc. The remaining trainees came from other aviation and technology institutions. The findings indicated that most respondents had educational qualifications directly related to aircraft maintenance and electronics technology. The substantial representation of graduates from major aviation institutions suggested that OMNI Aviation-MTC accommodated trainees from established aviation schools while maintaining participation from other educational institutions. This distribution reflected the center's role in providing practical training opportunities to individuals with relevant academic preparation.

#### 3.1.3 Distribution of Trainees According to MTC Program

The distribution showed that 179 trainees (89.50%) participated in the Training to License Program (TLP), while 21 (10.50%) were enrolled in Maintenance Training Plus (MT+). The TLP accounted for the majority of respondents during the study period. The considerable difference in program participation indicated that TLP represented the center's primary training service among the respondents. Consequently, the overall satisfaction findings were more heavily influenced by evaluations from TLP trainees. The unequal group sizes were therefore considered when interpreting program-specific satisfaction ratings and comparing trainee experiences.

### 3.2 Trainee Satisfaction with OMNI Aviation-MTC Training Services

#### 3.2.1 Satisfaction with the Training Program

The training program obtained an overall mean of 3.66 (SD = 0.43), interpreted as Very Satisfactory. All six indicators received Very Satisfactory ratings. The usefulness of training content and subjects obtained the highest mean of 3.71 (SD = 0.49), followed by program usefulness and effectiveness (M = 3.70, SD = 0.58) and practical tasks and subjects (M = 3.68, SD = 0.66). Technical content received a mean of 3.66 (SD = 0.51), while topic sequencing obtained 3.63 (SD = 0.51). Training documents received the lowest mean of 3.61 (SD = 0.58). The findings indicated that trainees considered the training program relevant, effective, and beneficial to their aircraft maintenance preparation. The favorable assessment of practical activities emphasized the importance of hands-on instruction in developing technical competence. Dela Peña et al. (2025) emphasized the relevance of practical training, curriculum alignment, and industry-academic collaboration in addressing competency gaps in Philippine aircraft maintenance education. Although training documents and topic sequencing remained within the Very Satisfactory category, their comparatively lower mean ratings indicated opportunities for instructional improvement. These findings supported reviewing the completeness and accessibility of training materials and the organization of lesson content to maintain a structured and consistent learning experience. Within the SERVQUAL framework, the findings reflected the reliability of the training program in delivering its intended educational services.

#### 3.2.2 Satisfaction with Training Personnel

Training personnel obtained an overall mean of 3.58 (SD = 0.57), interpreted as Very Satisfactory. All 11 indicators received Very Satisfactory evaluations. Clear explanations of concepts and ideas (M = 3.64, SD = 0.62) and clarity of voice (M = 3.64, SD = 0.64) received the highest ratings. The ability to answer questions (M = 3.59, SD = 0.67) and openness to participants' opinions (M = 3.59, SD = 0.70) also received favorable assessments. Conversely, effective use of class time obtained the lowest mean of 3.50 (SD = 0.78), followed by liveliness of discussion (M = 3.51, SD = 0.78). The findings indicated that trainees positively evaluated the technical competence, professionalism, and communication skills of their instructors. The high ratings for instructional clarity demonstrated the importance of communicating complex aircraft maintenance concepts effectively. Dela Peña et al. (2025) identified communication, teamwork, and practical competence as important components of aviation maintenance workforce preparation. However, comparatively lower ratings for class-time utilization and discussion engagement suggested areas requiring improvement. The comparatively lower scores for effective use of class time and liveliness of discussion highlighted opportunities to strengthen instructional pacing and trainee engagement. These results supported reviewing time-management practices, incorporating more interactive instructional activities, and examining workload arrangements as potential institutional improvement measures. In relation to SERVQUAL, the results reflected the assurance dimension through trainees' confidence in their instructors' knowledge and professional capabilities.

#### 3.2.3 Satisfaction with Training Facilities

Training facilities obtained an overall mean of 3.34 (SD = 0.57), interpreted as Very Satisfactory, but recorded the lowest overall rating among the four service dimensions. Practical equipment and tools received the highest mean of 3.58 (SD = 0.70), followed by the hangar or base area (M = 3.56, SD = 0.56) and training aircraft (M = 3.51, SD = 0.72). Training rooms and workshop areas received a mean of 3.48 (SD = 0.72), while the parking area, eating area, and aerodrome or line area obtained means of 3.46, 3.36, and 3.28, respectively. Comfort rooms received the lowest rating (M = 2.95, SD = 1.13), followed by locker areas (M = 2.99, SD = 1.03), both interpreted as Satisfactory. Basic amenities obtained an unrounded mean of 3.255 (reported as M = 3.26, SD = 0.91), interpreted as Very Satisfactory under the established satisfaction scale. The findings indicated that trainees positively evaluated the technical facilities and equipment supporting practical aircraft maintenance instruction. However, support facilities required greater management attention. The comparatively lower evaluations of comfort rooms and locker areas indicated a need to prioritize these facilities in subsequent institutional assessments. Guo et al. (2025) demonstrated the importance of institutional service quality in shaping student learning satisfaction, reinforcing the relevance of physical and support services to the educational experience. The findings therefore emphasized that training quality depended not only on specialized equipment but also on the accessibility, cleanliness, and functionality of supporting facilities.

#### 3.2.4 Satisfaction with Customer Service

Customer service obtained an overall mean of 3.59 (SD = 0.53), interpreted as Very Satisfactory. All five indicators received Very Satisfactory evaluations. Ease of inquiry regarding OMNI Aviation programs obtained the highest mean of 3.67 (SD = 0.56), followed by payment and accounts handling (M = 3.65, SD = 0.61) and information dissemination (M = 3.60, SD = 0.62). Professional handling of trainee concerns received a mean of 3.57 (SD = 0.66), while professional attitude toward trainees obtained the lowest mean of 3.46 (SD = 0.81). The findings indicated that OMNI Aviation-MTC maintained generally effective administrative and customer service processes. Trainees positively evaluated the accessibility of program information, organization of financial transactions, and handling of inquiries. Guo et al. (2025) highlighted the relevance of service quality dimensions to student satisfaction, particularly the importance of responsiveness, assurance, and empathy in educational services. These findings emphasized the need to combine efficient administrative procedures with respectful and trainee-centered service delivery.

### 3.3 Comparison of Trainee Satisfaction According to MTC Program

#### 3.3.1 Satisfaction Differences Between TLP and MT+ Trainees

Both TLP and MT+ trainees evaluated all four service dimensions as Very Satisfactory. MT+ trainees reported higher satisfaction with the training program (M = 3.75, SD = 0.34) than TLP trainees (M = 3.65, SD = 0.44). Similar differences were observed for training personnel, with MT+ obtaining a mean of 3.65 (SD = 0.53) compared with 3.57 (SD = 0.57) for TLP. Training facilities received means of 3.48 (SD = 0.47) for MT+ and 3.32 (SD = 0.58) for TLP. Customer service ratings were identical in terms of mean scores, with both programs obtaining 3.59, although their standard deviations differed between TLP (SD = 0.54) and MT+ (SD = 0.40). The findings indicated consistently favorable evaluations across both training programs. The training program was the highest-rated dimension for both groups, while training facilities received comparatively lower assessments, particularly among TLP trainees. The slightly higher ratings from MT+ participants reflected descriptive differences in perceived service experiences. Because the analysis relied on descriptive statistics and involved unequal group sizes of 179 TLP trainees and 21 MT+ trainees, these differences were interpreted as observed variations in mean satisfaction scores rather than evidence of statistically significant program effects. Overall, the findings supported maintaining existing program strengths while prioritizing improvements in physical facilities and support services.

### 3.4 SWOT Analysis of OMNI Aviation-MTC Training Services

#### 3.4.1 Institutional Strengths in Training Delivery and Customer Service

The SWOT analysis highlighted six major perceived strengths: favorable evaluations of training programs, positively rated practical training opportunities, favorable assessments of training personnel, high overall trainee satisfaction, well-rated customer service procedures, and effective handling of trainee inquiries as perceived by respondents. The training program obtained the highest overall satisfaction rating (M = 3.66, SD = 0.43). Practical equipment and tools also received favorable evaluations (M = 3.58, SD = 0.70), while customer service demonstrated strengths in inquiries (M = 3.67, SD = 0.56) and payment and accounts handling (M = 3.65, SD = 0.61). These findings indicated that OMNI Aviation-MTC possessed important instructional and organizational advantages. Access to operational aircraft, practical maintenance activities, and technically competent instructors strengthened the relevance of the training experience. Dela Peña et al. (2025) emphasized that practical training and industry-aligned competencies contributed to graduate readiness in aircraft maintenance education. Furthermore, systematic administrative processes and accessible program information contributed to favorable trainee perceptions. These strengths provided a foundation for maintaining training quality, reinforcing institutional credibility, and differentiating the center from competing aviation training providers.

#### 3.4.2 Weaknesses in Instructional Delivery and Support Facilities

The analysis identified relative service improvement priorities involving training documents, classroom engagement, effective use of class time, topic sequencing, staff professionalism, and the condition of support facilities. Training documents received a mean of 3.61 (SD = 0.58), while topic sequencing obtained 3.63 (SD = 0.51). Effective use of class time (M = 3.50, SD = 0.78) and liveliness of discussion (M = 3.51, SD = 0.78) received comparatively lower ratings. Professional attitude toward trainees obtained a mean of 3.46 (SD = 0.81). Among physical facilities, comfort rooms (M = 2.95, SD = 1.13) and locker areas (M = 2.99, SD = 1.03) represented the lowest-rated indicators. The findings suggested that instructional delivery and facility management required targeted improvements despite generally favorable satisfaction levels. The comparatively lower satisfaction ratings highlighted opportunities to improve instructional resources, review instructor workload allocation, and strengthen the management of trainee support facilities. These areas were therefore prioritized in the proposed service improvement strategies. These weaknesses emphasized the need for improved instructional resources, workload allocation, staff development, and systematic maintenance of support facilities.

#### 3.4.3 Opportunities for Workforce Development, Technology Integration, and Industry Partnerships

The analysis identified opportunities associated with increasing demand for aviation maintenance technicians, the integration of virtual reality (VR) into training, partnerships with maintenance, repair, and overhaul (MRO) organizations, and collaboration with airlines in updating technical curricula. These opportunities provided potential avenues for expanding professional preparation, improving instructional methods, and strengthening the alignment of training programs with industry requirements. Recent industry reports emphasized the demand for qualified aircraft maintenance personnel in the Philippines. SunStar (2026) reported expectations of increasing employment opportunities for aircraft maintenance professionals, while Dagooc (2024) highlighted the shortage of local aviation maintenance technicians and the recruitment of skilled Filipino personnel by overseas employers. Technological developments also created opportunities for innovative instructional approaches. Dela Peña (2025) demonstrated the educational potential of immersive VR environments in improving student engagement and technical competence, while Li (2023) highlighted the effectiveness of VR-based aircraft maintenance training in improving instructional efficiency and quality. Industry expansion further supported potential partnerships, as a new Lufthansa Technik Philippines facility in Clark was projected to generate approximately 1,200 skilled jobs (Carbungco, 2026). The establishment of a new Aviation Partnership Philippines hangar at Clark International Airport also reflected continued development in the maintenance sector (Difuntorum, 2025). These developments suggested opportunities for OMNI Aviation-MTC to pursue apprenticeships, industry-supported instruction, technical resource sharing, and competency-based training enhancements.

#### 3.4.4 External Threats to Institutional Competitiveness and Financial Sustainability

The SWOT analysis considered four potential external threats: competition among aircraft maintenance training providers, site-related constraints on future expansion, financial demands associated with facility improvements and technological advancement, and affordability pressures affecting prospective trainees. Competition could affect enrollment and tuition revenue, while infrastructure restrictions could limit facility expansion. Substantial investments in training aircraft, equipment, simulators, and physical improvements could also create financial pressure without guaranteeing immediate returns. The availability of lower-cost or industry-sponsored training programs represented an additional competitive concern. Padhi (2025) identified growth potential in the Philippine aircraft maintenance market, providing broader industry context for evaluating possible competitive pressures and workforce development opportunities. Location-related concerns were connected to surrounding development activities, including the planned relocation of Philippine Air Force facilities near OMNI Aviation (Orejas, 2023). The Bases Conversion and Development Authority (2024) also reported arrangements involving the transfer of military operational facilities within the Clark area. Technological advancement and industry modernization created additional requirements for updated training infrastructure and technical competencies (IMARC Group, 2026). Major capital expenditures involved substantial investments in long-term assets whose financial benefits required assessment over time (Klebnikov, 2026). Arnaldo (2026) discussed inflation and reduced discretionary spending in relation to domestic air travel, providing broader economic context for considering potential affordability pressures in aviation-related services. Furthermore, free training opportunities through industry partnerships, including the arrangement between the Philippine State College of Aeronautics and Lufthansa Technik Philippines (National Aviation Academy of the Philippines, 2023), represented another potential competitive consideration. These threats emphasized the importance of cost-effective improvements, competitive service quality, and strategic financial planning.

## 4. Conclusion & Recommendations

The study concluded that OMNI Aviation Corporation's Maintenance Training Center (MTC) received an overall Very Satisfactory assessment across its four service dimensions, based on evaluations from 200 trainees. The training program received the highest overall rating (M = 3.66, SD = 0.43), followed by customer service (M = 3.59, SD = 0.53), training personnel (M = 3.58, SD = 0.57), and training facilities (M = 3.34, SD = 0.57). Trainees positively evaluated the relevance of training content, practical learning opportunities, instructor competence, and

administrative efficiency. However, comparatively lower ratings were recorded for training documents, instructional engagement, time utilization, comfort rooms, locker areas, and staff professionalism. Both the Training to License Program (TLP) and Maintenance Training Plus (MT+) received favorable evaluations, although differences between the programs remained descriptive. The SWOT analysis identified organizational strengths and specific weaknesses, alongside opportunities for technological integration and industry partnerships and threats involving competition, financial constraints, and facility limitations. Overall, the findings demonstrated high perceived satisfaction with OMNI Aviation-MTC's training services while identifying specific priorities for strengthening trainee experiences, service consistency, and institutional sustainability.

The study was limited to secondary training service evaluations collected from 200 trainees at OMNI Aviation-MTC during 2024 and 2025, restricting the applicability of the findings to the institutional setting and respondent group examined. The reliance on existing records limited the assessment to the information captured by the institution-developed questionnaire. Because the evaluations were administered at the midpoint of training and completion was required, the responses reflected trainees' experiences at that stage and may have been influenced by the institutional assessment process. The unequal group sizes for the Training to License Program (n = 179) and Maintenance Training Plus (n = 21), together with the descriptive analytical approach, restricted comparisons to observed differences in satisfaction ratings. Furthermore, the study measured perceived service quality rather than directly assessing technical competency, practical performance, employment readiness, or the effectiveness of proposed improvement strategies. Future investigations were recommended to incorporate broader institutional samples, qualitative feedback, objective competency assessments, and longitudinal evaluations to provide a more comprehensive understanding of training outcomes and institutional service improvements.

## 5. Compliance with ethical standards

The study adhered to institutional research ethics requirements and applicable data privacy regulations. The researcher analyzed secondary Training Service Evaluation records obtained with authorization from OMNI Aviation Corporation management. Institutional records and trainee responses were handled confidentially and used exclusively for academic purposes in accordance with Republic Act No. 10173, or the Data Privacy Act of 2012, and its implementing rules and regulations. The researcher maintained responsibility for data security, management, analysis, and interpretation throughout the study.

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