A COMPREHENSIVE ANALYSIS OF A SCIENCE AND TECHNOLOGY UNIVERSITY'S ALIGNMENT WITH THE PERFORMANCE EXCELLENCE FRAMEWORK: A GOVERNANCE **OUTLOOK STUDY**

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Abstract

This study provides a comprehensive analysis of the Nueva Ecija University of Science and Technology's (NEUST's) alignment with the Philippine Quality Award (PQA) framework. It examines the university's performance across several domains, including technological advancements, safety and preparedness, supplier performance, student and customer satisfaction, human resource (HR) management, financial management, market performance, and compliance with governance standards. The research employs a descriptive quantitative approach, systematically analyzing data to assess organizational effectiveness. Key findings highlight NEUST's significant progress in technology integration, safety initiatives, supplier relationship management, and overall student and customer satisfaction (Ma et al., 2023). The university demonstrates excellence in HR management, fostering a conducive environment for growth and learning (Romiani & Farahbakhsh, 2024). Financially, NEUST has shown astute budget allocation and management, significantly contributing to its research and educational capabilities. Market analysis indicates growth in student enrollment, reflecting effective student attraction and retention strategies (Chandra et al., 2019). Strategic alignment and operational excellence are evident in NEUST's adherence to quality, safety, and legal standards. The study concludes with recommendations for future enhancements in areas like technological integration, safety protocols, supplier management, and workforce development, all aimed at sustaining NEUST's commitment to quality education and research.

Keywords: Philippine Quality Award Framework, Organizational Effectiveness, Higher Education, Quality Management, Continuous **Improvement**

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1. INTRODUCTION

In the landscape of organizational excellence, the Philippine Quality Award (PQA) Program stands as a significant benchmark for performance evaluation and improvement. Enacted into law by former President Fidel V. Ramos on February 28, 2001, through Republic Act No. 9013 (Congress of the Philippines, 2001) the PQA Program draws its inspiration from the renowned Baldrige performance excellence program of the United States. The PQA criteria for performance excellence, structured around seven categories, provide a robust framework for organizations to monitor, analyze, and enhance their performance across various dimensions (Congress of the Philippines, 2001). Derived from the Baldrige National Award program established by the National Institute for Standards and Technology (NIST) in 1987, the PQA criteria extend their focus beyond manufacturing and services to include educational management practices (Young, 2002). Despite its significance, there exists a notable gap in literature specifically dedicated to the PQA, with studies predominantly referencing the Baldrige framework. To address this void, the present research undertakes comprehensive study, embracing all PQA categories and scrutinizing each requirement within these seven dimensions. Implementing quality frameworks like the PQA framework is crucial for fostering continuous improvement in higher education. These frameworks, such as Kaizen practices and total quality management (TQM) principles, positively impact organizational performance and quality culture (Hashim et al., 2022). Quality assurance mechanisms, like the PQA framework, play a significant role in enhancing quality in higher education institutions (Barlan, 2023). Continuous quality improvement, a core aspect of TQM, is essential for educational environments (Velychko et al., 2022). The Thai qualifications framework for higher education ensures graduate quality (Wannarit, 2024). These frameworks provide structured approaches for institutions to enhance quality, competitiveness, and global recognition.

Future research focusing on the PQA should delve into the specific criteria for performance excellence within the context of organizational growth. While the PQA is gaining popularity in the Philippines, studies are limited on its criteria for performance excellence, with most research relying on the Malcolm Baldrige National Quality Award (Barlan, 2023). Understanding and overcoming challenges, fostering effective listening mechanisms, and maximizing the framework's potential are crucial areas for exploration (Fauzi, 2021). Organizations aiming for excellence and competitiveness can benefit from implementing practices aligned with the PQA program (Sulistyo et al., 2021). By concentrating on these aspects, further studies contribute significantly to enhancing can the application and impact of the PQA in both public and private sectors.

The PQA program evaluates organizations by examining their performance and continuous improvement mechanisms, emphasizing key process categories and results. The criteria are structured around seven categories: 1) leadership; 2) strategy; 3) customers; 4) measurement, analysis, and knowledge

management; 5) workforce; 6) operations; and 7) results (PQA, 2023). Organizations, both in the private and public sectors, can attain different levels of recognition based on their commitment and achievements in quality management ranging from the first level for commitment to fourth level for performance excellence (Congress of the Philippines, 2001). For educational institutions, the PQA offers a structured framework that aligns strategic objectives with day-to-day operations. This alignment ensures that actions and initiatives directly contribute to overarching goals, fostering a cohesive and purpose-driven environment. By integrating strategy and operations, institutions optimize resource allocation, streamline processes, and maximize their ability to achieve desired outcomes efficiently. The PQA, therefore, becomes a valuable tool for educational institutions committed to the pursuit of excellence and continuous improvement in their academic and administrative endeavors.

This research seeks to comprehensively assess the organizational effectiveness of a state university by exploring several key areas. The primary focus is to evaluate the quality of the university's products and services. This evaluation hinges on critical performance indicators such as reliability, responsiveness, and effectiveness, providing a wellrounded view of service quality. The study also aims understand the diverse expectations the university's customer base, which includes students, faculty, staff, and other stakeholders. By identifying and analyzing these expectations, the research will shed light on the needs of these groups and the university's effectiveness in meeting them. An important aspect of the research involves evaluating the alignment of the university's human resource (HR) practices with its organizational goals. This includes a thorough examination of recruitment processes, training programs, and performance management systems, assessing their efficacy and alignment with the university's objectives. The study will assess the congruence between the university's leadership practices and the standards set by the PQA framework. This assessment will provide insights into how the leadership's strategies and actions align with these esteemed standards. The study aims to offer a comprehensive analysis of organizational university's effectiveness, highlighting strengths and identifying areas for potential improvement.

The structure of this paper is as follows. Section 2 reviews the relevant literature on organizational effectiveness and quality frameworks, including the PQA and Baldrige frameworks. analyzes the research methodology Section 3 employed in this study, outlining the data collection and analysis techniques used. Section 4 presents the results of the study, examining Nueva Ecija University of Science and Technology's (NEUST's) performance across various dimensions. Section 5 discusses these findings in the context of existing literature and provides insights into the university's strengths and areas for improvement. Finally, Section 6 concludes the paper with recommendations for future enhancements and potential areas for further research.

2. LITERATURE REVIEW

of organizational culture organizational commitment, job satisfaction, and behavior control within organizations has been extensively studied. Research has shown a strong relationship between supportive organizational culture (SOC) and organizational commitment (Katper et al., 2020). Additionally, studies have indicated that organizational culture significantly affects job satisfaction and employee engagement (Hulkova et al., 2024). Furthermore, organizational culture influences various aspects of management and organization by shaping the thoughts and behavior of managers and employees (Janicijevic, 2022). Understanding these dynamics is crucial when examining the relevance of the PQA in shaping organizational practices and fostering a culture of continuous improvement, especially in higher education institutions. By exploring how leadership organizational culture, and employee satisfaction interplay, organizations can better leverage the PQA framework to drive performance excellence and growth.

The PQA framework consists of seven essential 1) leadership; 2) strategy; 3) customers; 4) measurement, analysis, and knowledge management; 5) workforce; 6) operations; and 7) outcomes (PQA, 2023). These categories support self-evaluation, awards, and feedback, improving practices, facilitating best practice communication, and aiding planning and learning. The leadership triad (categories 1-3) connects with the results triad (categories 5-7), highlighting the link between leadership and results (Miranda & Reyes-Chua, 2021). Central to the framework, category 4 focuses on goal-based diagnostics, flexibility, and a systems approach, aligning organizations with strategic objectives (PQA 2017-2021). Incorporating frameworks like the PQA fosters continuous improvement, enhancing quality, competitiveness, and recognition (Bhandary et al., 2022). PQA benefits include high processing speeds, interactive interfaces, and robust data storage (Badar et al., 2021). Quality assurance measures are globally recognized as excellence standards in higher education, including in the Philippines (Dizon & Tolentino, 2022). Assessing policies ensures alignment with societal demands (David et al., 2020), and the Accrediting Agency for Chartered Colleges and Universities in the Philippines (AACCUP) acknowledges institutions maintaining standards (Escolano, 2021).

The PQA has been underexplored in the local literature, with studies often relying on other quality frameworks. The importance of effective listening processes for gathering input to enhance marketing strategies and company development efforts (Ryan et al., 2012). This highlights the significance of understanding leadership dynamics, such as the leadership triad, to drive organizational success. Implementing efficient listening mechanisms can aid in leveraging insights for strategic decision-making and fostering growth within companies. The case study of Don Chalmers Ford (2016) exemplifies the advantages of active listening techniques in fostering continuous improvement and leveraging opportunities for growth.

Prioritizing effective methods for gathering customer satisfaction data is crucial for companies seeking to outperform their competitors (Kussusanti et al., 2022). By actively listening to customers through various channels like call centers, surveys, and social media, organizations can gain valuable insights that lead to tangible benefits for both the company and its stakeholders (Macnamara, 2020). This approach goes beyond statistical data, emphasizing the importance of understanding and responding to the voice of customers to drive satisfaction and loyalty (Macnamara, 2020).

Further study on the PQA criteria for performance excellence is crucial as the PQA gains popularity in both public and commercial sectors, particularly within the Philippines, which has its own distinct history and culture. Future research should focus on overcoming problems, cultivating effective mechanisms, listening and fully the framework's potential for organizational growth. Integrating digital strategies and social media for knowledge sharing, as explored by Lipipun and Angasinha (2023) and Sidhu et al. (2023), can enhance organizational communication and performance within educational settings. Additionally, the role of strategic agility in securing a sustainable competitive advantage, discussed by Rizki et al. (2023), and the management and internationalization research strategies for economic well-being, highlighted by Canaj et al. (2022), underscore the multifaceted approach needed for educational institutions aiming for excellence. This study recognizes the PQA as a critical tool for organizational enhancement, especially within educational institutions, where the limited existing literature on PQA underscores the need for comprehensive investigation. By examining the diverse dimensions of PQA within the specific context of educational management, this study aims to contribute to body of knowledge, offering practical implications for institutions committed to achieving excellence and continuous improvement.

The PQA framework, structured around six central categories, forms a comprehensive performance system that evaluates organizational processes and results. Leadership sets the tone, values, and vision, aligning strategic planning processes to translate goals into actionable plans. The framework emphasizes understanding and meeting stakeholder expectations, with customer feedback shaping processes and outcomes. Robust measurement systems, effective analysis, and knowledge management are crucial for performance assessment. The workforce category focuses on engagement and alignment with strategy, while the operations category assesses program design, delivery, and innovation. The interplay of leadership, strategy, customer focus, measurement, workforce, and operations collectively drives organizational success.

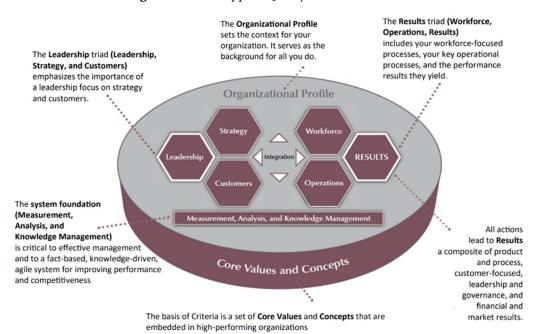


Figure 1. The Philippine Quality Award framework

Source: PQA (2023, p. 5).

These categories do not operate in isolation; instead, they are intricately connected and reinforce one another. For instance, effective leadership sets the strategic direction, which, when aligned with customer expectations and supported by a highperforming workforce, contributes to optimal operational outcomes. Measurement and analysis. positioned at the core, provide the necessary feedback loops to continuously improve and refine all aspects of the organizational system. The PQA framework encourages organizations to view performance as a holistic, interconnected system, fostering a culture of excellence, adaptability, and continuous improvement. This approach prompts continual assessment and refinement of processes and outcomes, optimizing performance across diverse dimensions for both short-term success and long-term sustainability. Frameworks like the PQA support continuous improvement through holistic methods. The plan-do-check-act (PDCA) cycle in lean manufacturing, which promotes regular process review and adjustments (Maldonado-Matute et al., 2023), and holistic marketing, which positively impacts organizational performance (Omoyebagbe & Adeyeye, 2023), align with this integrated view. By incorporating these tools and strategies, organizations can enhance performance across various areas.

3. RESEARCH METHODOLOGY

The research design employed in this study was descriptive quantitative. This approach aimed to systematically describe and analyze the state of organizational effectiveness at the NEUST based on quantitative data. Descriptive research provides a detailed account of existing phenomena, allowing for a comprehensive understanding of the various dimensions under investigation. methods facilitated the numerical measurement and analysis of data, providing statistical insights into the research objectives (Creswell, 2014).

conducted The study was the organizational context of the NEUST. NEUST served as the primary locale for data collection, analysis, and interpretation. Situated in Nueva Ecija, Philippines, NEUST's unique organizational structure, academic programs, and administrative processes offered a rich context for the assessment of organizational effectiveness. The findings the research were specific to the NEUST setting and contributed insights applicable to similar educational institutions.

Document review formed a pivotal component the data-gathering process. Reports publications generated by NEUST were systematically examined to extract relevant information related to product and service quality, stakeholder expectations, practices, and leadership alignment. This included official reports, strategic plans, academic publications, and other relevant documents that provided insights into the university's organizational processes and performance.

Structured interviews were conducted to complement the document review process. Key stakeholders, including university officials, faculty members, administrative staff, and representatives from the student body, were interviewed to gather qualitative perspectives on organizational effectiveness. The interviews aimed to provide a nuanced understanding of stakeholder expectations, experiences, and perceptions, supplementing the quantitative data obtained through document review. Descriptive statistics were employed to analyze trends, patterns, and relationships within the data. Qualitative data from interviews underwent thematic analysis to identify recurring themes and patterns in stakeholder perspectives. This research adhered ethical guidelines, to the confidentiality and anonymity of participants. Informed consent was obtained from individuals participating in interviews, and the research was conducted with integrity and respect for the rights and well-being of the participants.

Alternative methods suitable for conducting this research included mixed methods, case studies, and longitudinal studies. Mixed methods combined quantitative and qualitative approaches, enhancing the comprehensiveness of the analysis. A case study provided an in-depth examination within a real-life context, which was beneficial for understanding the nuances of organizational effectiveness at NEUST. Longitudinal studies involved repeated observations over time, identifying trends and long-term outcomes, and were useful in tracking changes and developments in organizational effectiveness.

4. RESEARCH RESULTS

4.1. Assessment of the overall quality of products and services offered by the state university

Nueva Ecija University of Science and Technology consistently surpasses national board examination passing percentages in fields such as education, civil engineering, mechanical engineering, architecture, and nursing. In 2022, Nursing achieved a first-time pass rate of 93.64%, with similarly high pass rates in architecture and elementary education. However, chemistry, agriculture, electrical engineering, and mechanical engineering faced challenges with lower pass rates. NEUST addresses these disparities through strategic interventions like curriculum reviews, faculty development, and enhanced student support. NEUST's high ranking in the Philippine Universities Ranking (by FindUniversity.ph) — third in Nueva Ecija and 13th in Central Luzon — reflects its commitment to academic excellence and effective student preparation.

Employability rates fluctuated from 2018 to 2022, highlighting the need for continuous improvement to align graduates' skills with industry requirements. While the College of Architecture achieved a high employability rate of 98.41%, other colleges like Agriculture and Criminology reported lower rates. To improve employability, NEUST focuses on strengthening career services, fostering industry collaboration, and updating curricula to meet job market demands. Despite challenges, NEUST's overall performance in employability compared commendable remains to universities in Central Luzon.

NEUST demonstrates research excellence with significant outputs in both international and local publications. From 2017 to 2022, the university saw a continuous increase in citations, reinforcing its reputation in the research community. NEUST promotes knowledge dissemination through numerous presentations at various forums and has shown a positive trend in securing substantial research funding from 2018 to 2021. This funding has enhanced project effectiveness and aligns with NEUST's commitment to research The university emphasizes the practical application of research, with a positive trend in research utilization from 2017 to 2021, contributing to social progress. NEUST obtained 12 patents and 35 copyrights, underscoring its role in technological advancements. Research incentives for publications increased, reflecting NEUST's commitment to a research culture. Research and innovation centers, such as the Bamboo and Orchard Project and the Center for Environmental Research, play pivotal roles in ensuring NEUST remains at the forefront of innovation.

NEUST's extension services highlight the university's strong commitment to community engagement, social responsibility, and practical application of knowledge for societal betterment. NEUST has increased its budget for extension services, peaking in 2021, reflecting its investment in expanding these programs. This budget growth has enabled the development of impactful programs addressing local needs and fostering sustainable development. The university consistently surpasses its targets for beneficiaries, demonstrating its effectiveness in reaching and serving diverse communities. Notable projects include "Family Productivity and Job Creation amidst COVID-19" "Family which produced facemasks and clinical gowns, supporting front liners and providing employment during the pandemic. Additionally, the establishment of Community Learning Resource Centers (CLRCs) ensured access to education for students without internet connectivity. NEUST's strategic partnerships have strengthened its extension services, with collaborations increasing annually from 2017 to 2022, enhancing support and resources for comprehensive societal needs.

NEUST excels in production and incomegenerating projects, significantly contributing to financial sustainability. The university's projects have shown impressive performance, with earnings increasing substantially over the years. Despite a slight dip in 2019 and the challenges of the COVID-19 pandemic, NEUST demonstrated resilience and adaptability, continuing to grow its earnings. These trends affirm the effectiveness of NEUST's projects in supporting various initiatives. The sustained growth highlights NEUST's commitment to financial sustainability, resource generation, and strategic planning. The university's innovative approach and adaptability ensure its robustness in supporting its mission of providing quality education, conducting impactful research, and engaging with the community.

4.2. Process effectiveness and efficiency

From 2018 to 2022, NEUST's academic programs made significant progress in accreditation. In 2018, 11 programs met initial standards. By 2019, seven programs advanced to the second level and two to the third level. In 2020, 22 programs reached the third level. By 2021, 27 programs remained at the third level, and five advanced to the fourth level. In 2022, 20 programs held the third level, and six reached the fourth, demonstrating NEUST's commitment to academic excellence. All graduate programs were accredited in 2022, with nine at the third level and four at the second level, indicating high quality. Only one program was at the first level, showing areas for improvement.

NEUST maintained high standards of program compliance across all colleges and campuses over four years. Each college achieved a perfect 100% compliance rate. The Graduate School maintained a 90% compliance rate over the last three years. NEUST's campuses, including Gabaldon, San Isidro, Atate, and Fort Magsaysay, also achieved 100% compliance. This centralized effort ensures quality and rigor in academic offerings. NEUST's compliance was recognized with the 2022 Gawad Parangal — Edukalidad Parangal sa Kahusayan for Certificate of Program Compliance by the Commission on Higher Education (CHED).

NEUST implemented technological innovations to enhance administrative functions and improve the student experience. In 2022, the student radiofrequency identification (RFID) system provided modern identification and access capabilities, enhancing security and convenience. The learning management system, introduced in 2020, enabled virtual learning and teaching, creating a dynamic educational environment. The integrated online enrollment system, implemented in 2019, streamlined the enrollment process, making it more efficient and accessible. These innovations demonstrate NEUST's commitment to improving operations and enriching the educational journey.

From 2020 to 2022, NEUST demonstrated high participation in earthquake drills, with rates of 91% to 93% across all campuses. The main campus and off-campuses maintained participation levels of 90% to 93%, effectively integrating earthquake preparedness protocols. Individual campuses, including Sumacab, San Isidro, Fort Magsaysay, Atate, and Gabaldon, showed high engagement and compliance. Additionally, fire drill participation was consistently high, underscoring NEUST's dedication to fire safety. The sustained high participation rates highlight the successful integration of fire drill practices.

Supplier performance at NEUST was systematically assessed from 2020 to 2022 across equipment, office supplies, and food and snacks. Each category showed notable improvement over the years. Equipment suppliers improved from a score of 4.40 in 2020 to 4.50 in 2022. Office supplies suppliers' performance increased from 4.32 in 2020 to 4.40 in 2022. Food and snack suppliers consistently performed well, with scores rising from 4.50 in 2020 to 4.60 in 2022. These trends highlight the suppliers' commitment to quality and NEUST's effective supply network, contributing to efficient operations and academic community satisfaction.

4.3. Customer results

Nueva Ecija University of Science and Technology's student satisfaction levels have consistently improved across campuses. In 2022, the Main Campus saw satisfaction rise to 95%, up from 88% in 2020. San Isidro Campus recorded the highest satisfaction at 98%, up from 88% in 2020. Off-campus satisfaction increased from 82% in 2020 to 89% in 2022. These results reflect NEUST's commitment to providing quality education and services, effectively integrating student feedback, and enhancing the overall student experience.

NEUST's extension services have shown positive trends in customer satisfaction from 2020 to 2022. The main campus saw satisfaction levels rise from 90% in 2020 to 93% in 2022. Other campuses, such as Sumacab, San Isidro, and Atate, saw increases, with ratings ranging from 88% to 96% in 2022. Fort Magsaysay and Gabaldon campuses maintained high satisfaction levels between 85% and 93%. These results demonstrate NEUST's commitment to enhancing extension services and delivering valuable community services.

Customer engagement at NEUST is robust, with 100% participation in activities such as University Student Government elections, Annual Leadership Training, Project E-Abot, Tara Usap Tayo, University

Meet, Charter Anniversary, State Colleges and Universities Athletic Association (SCUAA), and Literary and Cultural Activities. This high participation indicates strong engagement and involvement from students and other customers, fostering a sense of belonging, collaboration, and support for NEUST's initiatives.

4.4. Workforce results

Nueva Ecija University of Science and Technology prioritizes HR management, recognizing its personnel as key contributors to its success. The university fosters a supportive environment promoting growth, collaboration, and continuous learning. Effective HR initiatives enhance practices, resulting in a skilled and motivated workforce focused on professional development. Faculty members have shown increasing educational attainment, with rising numbers holding master's and PhD degrees from 2019 to 2021, underscoring NEUST's commitment to academic excellence. Faculty distribution across ranks demonstrates a focus on career advancement and expertise balance. Non-teaching personnel stability with a slight increase in permanent staff ensures operational needs are met, reflecting NEUST's commitment to a reliable workforce.

4.5. Workforce climate and engagement

Nueva Ecija University of Science and Technology demonstrates full compliance (100%) in health, security, and accessibility programs. initiatives encompass consultations, medical and dental services, accident insurance, and wellness programs. Security measures include protocols, roving security, and 24-hour presence, enhancing safety. Accessibility efforts feature clinics, ramps, and fast lanes, ensuring convenience for persons with disabilities (PWDs), seniors, and pregnant individuals with free transportation. Faculty retention from 2018 to 2022 shows stable teaching positions, while non-teaching personnel retention indicates areas for improvement. NEUST provides comprehensive benefits, salaries, bonuses, and allowances, supporting institutional stability. Nonteaching staff participation in training and seminars increased locally and internationally, emphasizing NEUST's commitment to professional growth and advancing its mission.

4.6. Leadership and governance results

to 2022, NEUST's From 2018 leadership and governance demonstrate strong commitment from with consistent top and middle managers, attendance rates of 98-100% at key organizational activities such as monthly Admin Council meetings, planning sessions, and "A Time with the President" events. The university has garnered several accolades, including the "Best Internationalization Practice During Pandemic Award" (2022), recognition in Times Higher Education Impact Rankings 2022, and top accreditation for the third level and the first level programs. Other notable achievements include the "1st Philippine Higher Education Internationalization Award" (2021), the International Organization for Standardization (ISO 9001:2015) Certification (2018), and membership in the Southeast Asia Ministers of Education Organization (SEAMEO) Schools' Network (2020). NEUST upholds good governance through competitive bidding, catalytic activities, and transparency, ensuring compliance with regulatory standards. Recognized by the Department of Energy for Energy Efficiency and Conservation practices, NEUST promotes gender equality and inclusion and engages in extensive community service initiatives like donation drives, support for Indigenous Peoples, and medical missions.

4.7. Financial, market, and strategy results

Nueva Ecija University of Science and Technology has shown effective financial management and a positive trend in budget allocation from 2018 to 2022. The university's budget grew significantly, reflecting strong support for its mission. Budgets for General Administrative Support Services and Auxiliary Services both increased, highlighting NEUST's commitment to enhancing operational efficiency. The Advanced Education and Higher Education Programs also saw notable budget increases, along with substantial growth in funding for research programs, extension services, and capital outlay. Internally generated income, including tuition fees, significantly, growth. marking rose overall The university consistently achieved high budget utilization rates, reflecting efficient financial management. The increasing budget allocation supports infrastructure, technology, research, faculty development, and student services, contributing to NEUST's commitment to quality education and holistic student development.

distribution NEUST's campus municipalities provides key insights into accessibility and competitive positioning. This geographic spread supports strategic analysis and identifies growth opportunities. Over the past five years, NEUST has seen significant enrollment growth, rising from 18,086 in the first semester of 2017-2018 to 27,735 in 2021-2022, and from 17,389 to 25,187 in the second semester. This consistent growth reflects strong market performance in student attraction and retention, although slight variations between semesters warrant further investigation. NEUST's effective partnerships for extension programs underscore its ability to expand market reach and community impact through collaborative efforts. These collaborations enhance NEUST's market position and benefit the wider community.

4.8. Strategy implementation

Nueva Ecija University of Science and Technology meticulously tracks its strategic priorities, core functions, and research/extension/training objectives at various levels. The university monitors trends in student enrollment, program accreditation, graduate employment, and exam performance, using this data to anticipate future trends and identify areas for improvement. Strategic objectives, action plans, and key performance metrics are aligned across operations, integrating data into strategic planning, decision-making, and continuous improvement efforts. NEUST's commitment to compliance is evident in areas such as staff training, safety regulations, ethics approval for research, data privacy, financial

audits, governance policies, CHED requirements, ISO 9001:2015, Republic Act No. 9184 (Congress of the Philippines, 2003) in procurement, and standards for student welfare. This comprehensive compliance underscores NEUST's dedication to quality, safety, legal obligations, and best practices, demonstrating its commitment to excellence and continuous improvement.

5. DISCUSSION

5.1. Overall quality of products and services

Nueva Ecija University of Science and Technology stands out for its commitment to excellence across all its major functions. In terms of instructional quality, the university consistently surpasses national average pass rates in board examinations for key courses, particularly excelling in Nursing and Architecture, reflecting its dedication to providing high-quality education and ensuring academic success (Anam et al., 2022). NEUST's research output substantial, with increasing citations and significant funding, highlighting the institution's leadership in innovation (Véliz & Marshall, 2021). The university's extension services demonstrate strong community engagement, with successful partnerships driving impactful projects such as job creation initiatives and educational access during the pandemic (Ashraf, 2019). This underscores NEUST's responsiveness to community needs and its commitment to making a positive societal contribution. NEUST's income-generating projects are crucial for ensuring financial sustainability, showcasing resilience and strategic resource management (Kapustian et al., 2021). Financial sustainability is a key challenge for universities, and NEUST's effective resource management significantly contributes to its operational stability (Alshubiri, 2021). NEUST's reliable and effective operations, coupled with its focus on academic and community needs, solidify its position as a leading institution dedicated to continuous improvement and societal advancement.

5.2. Operational efficiency and effectiveness

Nueva Ecija University of Science and Technology has significantly enhanced its operational efficiency and effectiveness, with notable advancements in undergraduate program accreditation over the past five years, demonstrating a strong commitment to academic quality and excellence (Järvis et al., 2021). High compliance rates across all colleges and campuses highlight NEUST's adherence to educational standards and strategic focus on quality assurance (Makhynia et al., 2021). Technological innovations, such as the student RFID system, learning management system, and integrated online enrollment system, have streamlined administrative functions and enriched the student experience, showcasing NEUST's commitment to leveraging technology for operational enhancement (Owolabi, 2021). NEUST's dedication to safety is evident through active participation in earthquake and fire drills, emphasizing a secure environment for stakeholders (Nemchenko et al., 2021). Continuous improvement in supplier performance assessments further enhances operational efficiency (Alian & Alhaj, 2023). These initiatives collectively demonstrate NEUST's commitment to safety, quality, and efficiency in operations. By continuously improving processes and embracing technological advancements, NEUST solidifies its position as a leading institution dedicated to delivering high-quality education and operational excellence.

5.3. Customer satisfaction and engagement outcomes

Nueva Ecija University of Science and Technology shows a strong commitment to student and customer satisfaction, underscoring its dedication to quality education and community engagement. Student satisfaction at the Main Campus rose from 88% in 2020 to 95% in 2022, while the San Isidro Campus increased to 98% from 88% in 2020. Off-campus locations also saw improvement, with satisfaction increasing from 82% to 89%. Extension services at the Main Campus improved from 90% in 2020 to 93% in 2022, with other campuses reporting satisfaction levels between 88% and 96%. NEUST achieved full participation in activities like University Student Government elections, leadership training, and cultural events, showcasing high engagement and a collaborative community (Chandra et al., 2019; Pan et al., 2022). These outcomes reflect NEUST's strategic focus on quality, innovation, and community involvement, reinforcing its reputation excellence and stakeholder satisfaction.

5.4. Workforce development and retention outcomes

Nueva Ecija University of Science and Technology's HR management is marked by a strong commitment to developing a highly educated teaching staff and maintaining a stable workforce. The university's faculty members consistently exhibit academic excellence, with a growing number of master's and PhD holders each year. This trend reflects NEUST's dedication to fostering a knowledgeable teaching staff (Romiani & Farahbakhsh, 2024). The growth and diversity in the faculty profile, with a balanced distribution across academic ranks. a collaborative and enriching learning environment (Romiani & Farahbakhsh, 2024). NEUST's effective HR practices are evident in its faculty retention efforts, aligning with studies on faculty retention in medical schools that emphasize the importance of support programs for recruitment and turnover reduction (Zehra et al., 2021). By focusing on faculty development and retention, NEUST sustains a supportive work environment and ensures continuous improvement in academic quality. enhance Implementing strategies to faculty satisfaction, career advancement, and well-being, NEUST strengthens its human capital and reinforces its position as an institution dedicated to excellence in education and employee support. These efforts are crucial for maintaining a skilled and motivated workforce, contributing to the university's overall mission and strategic goals.

5.5. Commitment to a positive workplace climate

Nueva Ecija University of Science and Technology fosters a positive workplace climate through comprehensive health, security, and accessibility programs, achieving full compliance. The university ensures a safe, healthy, and inclusive environment by providing essential services such as health consultations, medical and dental care, accident insurance, wellness programs, 24-hour security, and accessible facilities for PWDs, seniors, and pregnant individuals. Faculty retention rates improved from 81% in 2018 to 85% in 2022, indicating workforce stability, though non-teaching staff retention declined slightly. NEUST consistently maintains 100% provision of salaries, bonuses, and allowances. The university emphasizes continuous learning and professional development, increased participation in training and seminars. This commitment to enhancing workforce skills and knowledge underscores NEUST's supportive and inclusive environment. Research shows organizational climate significantly impacts job stress, burnout, and retention (Lan et al., 2019). By prioritizing these factors, NEUST strengthens employee welfare and retention, fostering a positive workplace climate.

5.6. Leadership and governance results

Nueva Ecija University of Science and Technology employs a comprehensive approach to achieving strategic priorities and research objectives, monitoring key performance measures like student enrollment, program accreditation, graduate employment, and exam performance (Yeung, 2018). By benchmarking against industry standards, NEUST identifies areas for improvement and aligns strategic objectives with action plans (Rizki et al., 2023). High participation from the top and middle managers in key activities, and awards such as the "Best Internationalization Practice During Pandemic Award" in 2022 and Times Higher Education Impact Rankings 2022, demonstrate NEUST's commitment to excellence (Leslie, 2019). university maintains robust governance through competitive bidding, catalytic activities, and transparency, consistently complying with regulatory requirements (Leslie, 2019). NEUST focuses on energy efficiency, conservation practices, gender equality, and social responsibility, aligning with ethical practices and sustainability (Velasco-Balmaseda et al., 2023). It engages in extensive community service initiatives, including disaster relief, support for Indigenous People, and healthcare missions, highlighting its societal contribution (Leslie, 2019). The university emphasizes employee welfare, retention, and continuous learning, reflected in stable faculty retention rates and consistent provision of salaries, bonuses, and allowances (Leslie, 2019). NEUST prioritizes workforce skills and knowledge enhancement through training and seminars (Miralles-Cardona et al., 2021). NEUST's leadership, governance practices, and commitment to excellence, sustainability, and community engagement position it as a leading institution dedicated to fostering a positive workplace climate and making a meaningful societal impact (De Lara & Santos, 2024).

5.7. Financial, market, and strategy outcomes

Nueva Ecija University of Science and Technology's effective financial management is demonstrated by a significant increase in budget allocations from 2018 to 2022, enabling substantial investments in infrastructure, academic programs, research, and student services. Key areas such as general

administrative support services, auxiliary services, advanced education, higher education, research, extension services, and capital outlay have all shown remarkable growth, underscoring NEUST's commitment to holistic development. Additionally, internally generated income, including tuition fees, has risen significantly, highlighting financial sustainability. High budget utilization rates emphasize NEUST's efficient resource management practices. The strategic distribution of NEUST's campuses across municipalities has enhanced market performance by improving accessibility and fostering community engagement. This strategy contributed to the consistent growth in student enrollment. NEUST's extension programs, supported by robust partnerships, have extended the university's market reach and impact, benefiting both the institution and the community. NEUST's strategic approach to financial management, resource allocation, and market engagement reflects its ability to grow sustainably and make a significant impact on its stakeholders.

5.8. Execution of strategic plans

Nueva Ecija University of Science and Technology employs a comprehensive approach to tracking and achieving its strategic priorities, core functions, and research objectives across various levels, including departmental and individual. The university monitors key performance measures such as student enrollment, program accreditation, graduate employment, and exam performance to identify trends and anticipate future developments Abernethy et al. (2021). By comparing its performance against benchmarks and industry standards, identifies areas for improvement and aligns strategic objectives with action plans. This integration ensures a unified approach towards achieving goals and continuous improvement. NEUST's commitment to compliance is evident across critical areas, including HR, safety, research ethics, data privacy, financial audits, governance policies, academic requirements, quality management, procurement, and student services. The university's comprehensive compliance with these requirements underscores its dedication to maintaining high standards of quality, safety, and legal obligations, reflecting its commitment to excellence in higher education.

6. CONCLUSION

At NEUST, a transformative journey has unfolded, aligning remarkably with the principles of the PQA framework. This journey, marked by continuous improvement and innovation, has seen the university evolve in various critical domains. As a beacon of technological advancements, NEUST has embraced a future-forward approach. Innovations in educational delivery and institutional operations have enhanced learning experiences and streamlined processes, fostering a more efficient and seamless

environment for the academic community. In terms of safety and preparedness, the university has demonstrated a strong commitment, with high levels of participation in earthquake and fire drills across all campuses, ensuring the safety and well-being of its members. NEUST's approach to supplier performance has been strategic and effective, fostering strong relationships and ensuring consistent improvements across various categories, significantly contributing to its operational efficiency. The increase in student and customer satisfaction levels, especially regarding extension services, reflects the exceptional quality of education and services provided, fulfilling the needs and expectations of its students and community. HR management at NEUST has been exemplary, cultivating a supportive work environment that values growth, collaboration, and continuous learning, thereby fostering a thriving and skilled workforce. Financial management and budget allocation at NEUST have been handled with astute precision, with a consistent increase in budget allocation for various programs underscoring the university's commitment to enhancing education and research capabilities. Market performance has been another area of success, with significant growth in student enrollment, signifying effective strategies for attracting and retaining students. NEUST Strategically and operationally, demonstrated exemplary performance, aligning strategic priorities, core functions, and objectives across different levels to ensure a unified approach toward achieving goals.

However, several limitations must be acknowledged. The study relies heavily on internal data and self-reported metrics, which may introduce biases and affect the objectivity of the findings. Additionally, the research focuses primarily on quantitative data, potentially overlooking qualitative aspects such as stakeholder perceptions and experiences. The cross-sectional design captures a snapshot of NEUST's performance at specific points in time rather than tracking longitudinal changes. The scope is also limited to NEUST, and the findings may not be generalizable to other institutions with different contexts and challenges. Finally, the reliance on secondary data sources may limit the depth of analysis. Future research should address these limitations by incorporating longitudinal studies, qualitative methods, and comparative analyses with other institutions. This would provide a more comprehensive and nuanced understanding of the factors contributing to institutional excellence and continuous improvement. The findings of this study are crucial for future research as they highlight NEUST's strengths and areas for growth, offering a model for other institutions aiming to align with the PQA framework. By identifying both achievements and challenges, this paper contributes valuable insights into the journey of achieving academic and operational excellence in higher education.

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