

Analysis of Quality Service System on Postgraduate School of Universitas Negeri Medan Oriented to Integrity Zone Worksheet

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Abstract. Academic services in higher education are educational services that are directly related to students as primary customers. Several factors that affect the quality of academic services include learning facilities and the performance of Study Program staff that have not been in accordance with student expectations. Current problems in academic services include financial constraints, shortage of manpower, and limited educational space. Academic information systems can help facilitate the process of managing academic and non-academic data and data integration in higher education. This study aims to obtain a quality management model at the Postgraduate School (PS) of Universitas Negeri Medan (Unimed). Through this study, it is expected to obtain a quality management model for academic services based on the determination of integrity zones determined by the Ministry of Administrative and Bureaucratic Reform. Several types of instruments that have been developed in this study to measure the achievements of this study are Instruments to achieve service quality indicators based on the Integrity Zone (ZI) have also been prepared in accordance with the characteristics of the Postgraduate School of Unimed. Data collection of types and standards of academic services for PS Unimed students is also carried out to obtain a measure of quality that has been running. The objects of this study are theses and dissertations from the research results of PS Unimed students that have been carried out previously. While the research subjects are students, lecturers and partners from business/industry circles that are relevant to the Study Program in the PS Unimed environment. Data analysis was conducted to obtain several quality management policies in PS Unimed so that they can be oriented to the business and industrial world.

Keywords: Quality Service; Integrity Zone; Universitas Negeri Medan.

1 Introduction

Academic services in higher education, particularly in postgraduate programs, are educational services directly connected with students as the primary customers. Improving the quality of

academic services in universities can be achieved by providing excellent services that meet the academic needs of each student as a user [1]. Several factors influence the quality of academic services, such as learning facilities and the performance of Study Program staff that do not meet the expectations of students. Current problems in academic services at universities include financial constraints, workforce shortages, and limited educational space. Academic information systems can assist in facilitating the management of academic and non-academic data and integrating data in higher education[2]. In addition, other factors that affect the quality of academic services include the learning facilities and the performance of Study Program staff, which may not meet students' expectations. Students may feel dissatisfied with the learning process, campus facilities, environment, and campus life, leading to complaints, burnout, and lack of interest in completing their studies on time [3].

Universitas Negeri Medan (UNIMED) has developed into one of the higher education institutions in Indonesia committed to improving the quality of educational services, particularly at the postgraduate level. The quality service system in the context of higher education is an essential component to ensure that all academic and administrative processes run efficiently, transparently, and in accordance with established standards. In an effort to enhance service quality, many higher education institutions have adopted various approaches, one of which is through the implementation of the Integrity Zone (ZI) [4].

The Integrity Zone is a designation given to government institutions whose leaders and staff are committed to realizing a Corruption-Free Zone (WBK) and a Clean and Serving Bureaucratic Zone (WBBM). This designation serves as an important benchmark in assessing the quality of public services across various sectors, including education. As a higher education institution, UNIMED is expected not only to produce graduates who are academically competent but also to uphold integrity, in line with the principles of good governance [5].

The implementation of ZI in the quality service system at the postgraduate level in UNIMED requires a holistic and evidence-based approach. This means that all components of the educational system, from administrative governance, curriculum, to student services, must be designed with consideration to the principles of ZI [6]. The main goal is to create an educational environment that is free from corruption, collusion, and nepotism (KKN), while also providing maximum service to students and other academic communities.

Research on meeting the needs of the quality service system at UNIMED, oriented towards the ZI framework, is highly relevant in the current era. With increasing demands for transparency and accountability in public services, UNIMED, as a higher education institution, must be able to meet this challenge by implementing a high-standard quality service system. This system must accommodate the needs of various stakeholders, from students, lecturers, to educational staff.

Several studies have shown that the implementation of ZI in educational institutions can increase student satisfaction with the services provided, accelerate administrative processes, and reduce the potential for KKN practices [7]. However, there are still many challenges in its implementation, especially in the complex higher education environment like UNIMED. Therefore, in-depth research is needed to analyze to what extent the postgraduate quality service system at UNIMED has met the needs and standards expected within the ZI framework.

This article aims to conduct an in-depth analysis of the fulfillment of quality service system needs in the postgraduate level at UNIMED, oriented towards the ZI framework. Through this approach, it is hoped that various key factors determining the success of ZI implementation, as well as obstacles that may be encountered in efforts to achieve optimal quality services, can be identified [8]. Additionally, this article will discuss various solutions that UNIMED can implement to improve its quality of services, particularly at the postgraduate level.

2 Literature Review

2.1 Quality Service System of Higher Education

The quality service system in higher education institutions is often the subject of various research studies. Quality services encompass various aspects, including the efficiency of administrative processes, academic quality, and student services. According to research conducted by Smith et al. (2024), a good quality service system in universities does not only refer to academic outcomes but also includes non-academic aspects such as student satisfaction with administrative services [9]. This is reinforced by the study by Jones (2019), which states that students who are satisfied with the services provided by the university tend to have a high level of loyalty to the institution [10].

The implementation of the Integrity Zone (ZI) in educational institutions has also become the focus of various studies. For example, Dewi and Hartono (2019) emphasized the importance of applying ZI in the education sector to minimize corrupt practices that can damage the credibility of the institution [11]. They argue that ZI not only impacts improving service quality but also plays a crucial role in forming a clean and accountable organizational culture.

Wibowo's (2021) research on the implementation of ZI in higher education showed that one of the biggest challenges is resistance from within the organization itself [12]. Many academic community members feel that the application of ZI only adds to the workload without providing direct benefits. However, the study also revealed that with adequate socialization and training, this resistance can be minimized [13].

This literature review provides an overview that the implementation of ZI in the quality service system in higher education institutions is a strategic step to improve service quality while building organizational integrity. However, the success of this implementation largely depends on the commitment of all parties within the institution.

2.2 Model Strategy of Academic Quality Management in Postgraduate School

In the effort to achieve continuous quality improvement, strategic concepts in quality management implementation are needed. Strategic Quality Management (SQM) concepts are identified as being similar to, or variations of, those mentioned by quality researchers such as Deming, Juran, Crosby, Feigenbaum, Ishikawa, Garvin, and others. Currently, the principles of quality management strategies are reflected in the criteria for obtaining Quality Awards and ISO 9000 [14]. Along the same lines, the concept of quality management strategies is essentially the same as the concept of quality management itself. Several strategies to enhance quality management in Postgraduate programs include:

1. **Long-Term Strategic Planning:** This involves formulating a long-term strategic plan that includes regular evaluations and continuous improvements to respond to changes in science and technology.
2. **Faculty and Staff Development:** Empowering faculty through continuous training, curriculum development, and providing incentives to encourage performance and innovation.
3. **Partnerships with Industry:** Building strong partnerships with industry and other external stakeholders to ensure the relevance of study programs and job opportunities for graduates.
4. **Educational Technology Utilization:** Wisely implementing educational technologies, including online learning platforms, to enhance accessibility and learning effectiveness.
5. **Periodic Performance Evaluations:** Conducting periodic evaluations of faculty performance and study programs by involving feedback from students, alumni, and industry.
6. **Internal and External Quality Assurance:** Implementing a quality assurance system that involves internal and external evaluations to ensure compliance with quality standards.
7. **Curriculum Innovation:** Continuously encouraging innovation in the curriculum by incorporating practical learning elements and accommodating the evolving needs of the job market.
8. **Stakeholder Engagement Management:** Building an effective stakeholder engagement management system, including forums and open dialogues, to maintain connectivity with various groups.

One of the quality management models applied in the education sector under the Ministry of Education and Culture of the Republic of Indonesia is depicted in Figure 1. The figure explains that the educational quality assurance system is conducted comprehensively, both internally by educational institutions (SPMI) and externally (SPME) by the Government and Regional Government, BSNP, and BAN-S/M. Externally, the Accreditation Body is tasked with and authorized to carry out external quality audits and determine accreditation. This is in accordance with the Ministry of Education and Culture Regulation No. 13 of 2018, which states that the National Accreditation Body (BAN) is an independent evaluation body that determines the eligibility of programs and educational institutions at the primary and secondary education levels in the formal education path, referring to the National Education Standards (SNP) [15].

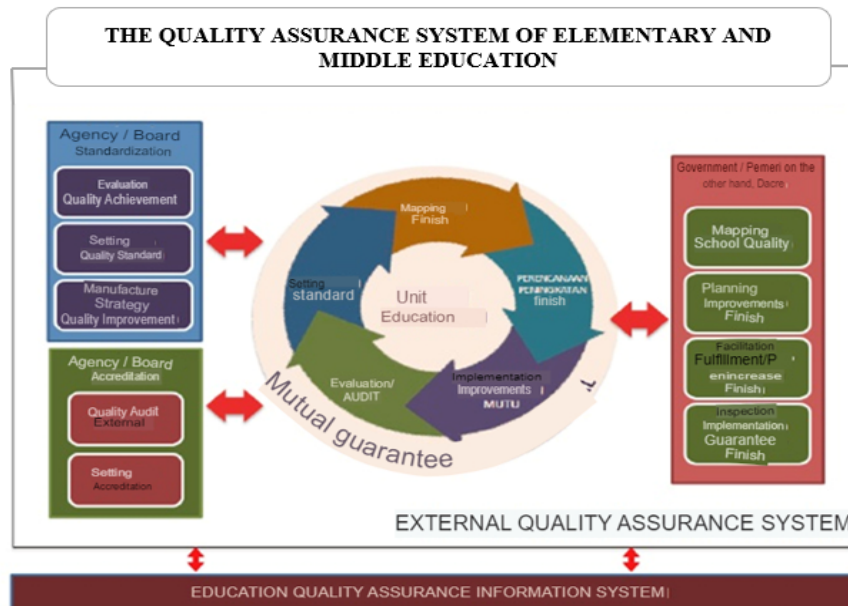


Fig. 1. The quality assurance system of education (SPMI and SPME)

3 Method

Research Location

This research was conducted at the Postgraduate Program of the State University of Medan (UNIMED), one of the higher education institutions in Indonesia with a strong reputation in providing higher education. The UNIMED Postgraduate Program offers various study programs covering fields such as education, science, and technology. The choice of this research location is based on the relevance of UNIMED as a state university that has implemented Integrity Zone (ZI) efforts to improve the quality of public services, including at the postgraduate level.

Type of Research

This study uses a descriptive qualitative approach, aiming to understand the phenomenon of the implementation of the quality service system in the UNIMED Postgraduate Program from the perspective of various stakeholders involved. Qualitative research was chosen as it allows the researcher to deeply explore the perceptions, experiences, and assessments of research subjects regarding the implementation of the Integrity Zone in academic and administrative service systems.

A descriptive approach is used to systematically identify and present the various components and stages that UNIMED has adopted in meeting the quality standards stipulated in the ZI framework. This method allows the researcher to depict the objective conditions in the field and interpret the data according to the context of ZI policy implementation.

Research Subjects

The research subjects in this study consist of three main groups:

1. Postgraduate students, who are the direct recipients of quality services at UNIMED. Student participation in this study is important to measure their level of satisfaction with the academic and administrative services provided by the university.
2. Lecturers, who act as policy implementers and play a crucial role in carrying out teaching and academic guidance functions in the postgraduate program.
3. Educational staff involved in administration and service management in the UNIMED Postgraduate Program, such as academic staff, financial administrators, and technical personnel who support the service process.

The respondents were purposively selected, with the criteria that they had at least one year of experience in academic and administrative processes in the UNIMED Postgraduate Program. The number of samples was adjusted to meet the saturation point, meaning when no significant new information was found.

Data Collection Techniques

Data collection was conducted through several methods:

1. In-depth interviews with students, lecturers, and educational staff. These interviews focused on their experiences and assessments regarding the implementation of quality services oriented toward ZI. The interview guidelines were prepared based on the main indicators in the ZI framework, such as transparency, accountability, service efficiency, and anti-corruption.
2. Observation of the administrative and academic service systems within the UNIMED Postgraduate Program. The observations were conducted to directly observe how these services operate, particularly during critical moments such as registration, payment, and student graduation application processes.
3. Documentation related to policies, regulations, and standard operating procedures (SOP) used in the postgraduate service system at UNIMED. These documents were analyzed to determine how well existing policies and procedures align with the principles of ZI.

Data Processing and Analysis Techniques

The collected data were analyzed using a thematic analysis approach. The stages of thematic analysis include:

1. Data transcription: Interview and observation results were transcribed verbatim to facilitate further analysis.
2. Data coding: Each relevant data unit was coded according to a specific theme or category. For instance, data related to transparency in administrative services were coded as "Transparency."

3. Thematic grouping: Coded data were grouped based on major themes related to key elements of the Integrity Zone, such as service integrity, user satisfaction, and challenges in ZI implementation.
4. Data interpretation: Grouped data were then analyzed and interpreted to determine how the postgraduate quality service system at UNIMED meets stakeholder needs within the ZI framework. The results of this analysis were combined with theories and previous research findings to provide a comprehensive picture.

Triangulation was used to ensure the validity of the data by comparing the results of interviews, observations, and documentation to identify consistency in the information. Additionally, member checking was conducted by involving research participants to review interview results and interim analyses, ensuring that the researcher's interpretations aligned with the participants' intentions.

4 Results and Discussion

4.2 Results

This research was conducted to analyze the fulfilment of the quality service system needs in the Postgraduate Program at the State University of Medan (UNIMED), which is oriented towards the Integrity Zone (ZI) framework. The Integrity Zone consists of six key components: change management, governance arrangement, human resource (HR) management arrangement, strengthening performance accountability, strengthening supervision, and improving public service quality. The data obtained from this research focused on the development and implementation of quality management policies based on ZI. Below are the key results from each component of the ZI that has been implemented at UNIMED:

1. Change Management

In this component, organizational changes at UNIMED began with the formation of a ZI Development Task Force. This team is responsible for overseeing and managing each stage of ZI implementation. Documents related to the formation and supervision, such as Decrees, Monitoring and Evaluation Reports (Monev), and Meeting Minutes, have been prepared and used as tools for program continuity monitoring.

The research results show that the process of ZI initiation and monitoring was generally well-executed. However, some challenges remain, particularly regarding the resistance to organizational cultural change. Many employees and lecturers require more intensive socialization about the long-term importance of ZI. Challenges faced include adaptation to technology changes and new methods in governance.

2. Governance Arrangement

Governance arrangement refers to how procedures and processes are structured to ensure efficiency and compliance with standards. At UNIMED, Standard Operating Procedures (SOPs) have been developed to ensure that public services and administrative processes run smoothly. One of the primary findings of this research is

that the SOPs used in the Postgraduate Program align with the Business Process Map established by the university.

However, while the SOPs have been developed and implemented, evaluation of SOP implementation still requires improvement. The findings indicate that not all SOPs have been fully integrated with digital technologies. The use of applications such as e-SAKIP (Government Agency Performance Accountability System) and SIMPEG (Personnel Management Information System) has helped, but there are still areas where manual processes are in use. More comprehensive digitalization across all service units would enhance service efficiency and accuracy.

3. Human Resource (HR) Management Arrangement

HR management at UNIMED has been improved through the implementation of workload analysis, which is used to allocate employees according to the institution's needs. This is supported by documentation showing employee needs planning and workload analysis.

Moreover, competency-based employee development has become one of UNIMED's main focuses. Employees, especially academic staff, are given opportunities to participate in competency development through workshops, technical training, and other professional development programs. However, monitoring the outcomes of employee training and development needs to be strengthened to ensure that the training provided has a real impact on both individual performance and the institution as a whole.

4. Strengthening Performance Accountability

In strengthening performance accountability, one important component is the involvement of leadership in the performance planning and evaluation process. The leadership at UNIMED has been actively involved in the development of the Strategic Plan (Renstra) and the Operational Plan (Renop) at the postgraduate level. Every document prepared is closely monitored, and performance evaluations are conducted through the SIMPEG and SISTER applications.

This research also found that the direct involvement of leadership in performance evaluation has succeeded in increasing their engagement in the implementation of strategic plans. However, some challenges remain in the dissemination of information to all staff, especially in the use of digital applications for performance reporting. More intensive routine monitoring is needed to maintain accountability.

5. Strengthening Supervision

To ensure no deviations in administrative and service processes, UNIMED has adopted an Internal Control System (SPI) designed to identify and mitigate potential risks. This SPI includes the implementation of a whistleblowing system, which allows employees or other parties to report misconduct anonymously.

The research findings show that the implementation of SPI has been effective in some areas, particularly in terms of transparency in service processes. However, the effectiveness of this system needs to be continuously monitored, especially in handling

public complaints. Furthermore, the socialization of SPI and the whistleblowing system to all employees needs to be intensified to ensure optimal system functioning.

6. Improving Public Service Quality

The last component of ZI focuses on improving public service quality. Research findings show that UNIMED has made several innovations in service quality improvement, including the digitalization of academic and administrative services. The use of websites and social media platforms such as Instagram and Facebook to disseminate public information is a positive step toward information transparency.

However, one of the main challenges encountered is the accessibility of digital services. Although services have been digitized, some services still require improvements, particularly in terms of speed and ease of access for users. A more intensive monitoring system is needed to measure user satisfaction levels and implement periodic improvements.

Table 1. Analysis of fulfilment document Integrity Zone (ZI) at Postgraduate Unimed

No.	ZI Component	Document Fulfilment	Description
1	Change Management	Circular Letter, Task Assignment Letter (SK) for Team, Monev Report	Team work documents and ZI development evaluation
2	Governance Arrangement	Standard Operating Procedures (SOP), Business Process Map	Business process integration and service innovation
3	Human Resource Management	Workload Analysis, Monev Report	Career development and HR monitoring
4	Strengthening Performance Accountability	Performance Report, SIMPEG Application	Digital performance planning and evaluation
5	Strengthening Supervision	SPI Report, Whistle Blowing	Internal supervision implementation and risk evaluation
6	Improving Public Service	Service Charter, Social Media	Digital service development and information transparency

4.2 Discussion

The research findings show that the implementation of the Integrity Zone (ZI) in the Postgraduate Program at UNIMED has been generally well-executed, though there are still some challenges that need to be addressed. One of the key findings is the limitation in information technology integration, particularly in the digitalization process of services, which still requires further improvements. Although there have been innovations in service provision, such as the use of the e-SAKIP and SIMPEG applications, certain areas have yet to fully optimize the use of technology to enhance efficiency. In the aspect of human resource (HR) management arrangement, there has been success in workload analysis and staff development, but a more intensive monitoring system is needed to ensure that employee training outcomes significantly impact performance improvement. On the other hand, the strengthening of supervision through the internal control system has been implemented well, but the effectiveness of the supervision

needs continuous monitoring, especially regarding transparency in handling public complaints and the whistleblowing system. Overall, the implementation of the Integrity Zone at UNIMED has brought positive changes to the quality service system. However, further improvements, particularly in the areas of technology integration and performance accountability, must remain a primary focus to achieve a Corruption-Free Zone (WBK) and a Clean and Serving Bureaucratic Zone (WBBM) on a sustainable basis. When compared to other research, such as the study by Dewi & Hartono (2018) on ZI implementation in educational institutions, the results at UNIMED show alignment in terms of the challenges and opportunities encountered in ZI implementation [11, 16]. Both studies found that internal resistance to organizational cultural changes is a significant challenge. However, with proper socialization and adequate information technology usage, these challenges can be overcome. This research also supports the findings of Wibowo (2021), which emphasized the importance of continuous monitoring in ensuring service accountability and employee performance [12, 17].

5 Conclusion

Overall, the implementation of the Integrity Zone in the Postgraduate Program at UNIMED has had a positive impact on public service quality and institutional governance. Although there have been significant improvements in several components, such as governance arrangement and the strengthening of performance accountability, there is still room for improvement, especially in service digitalization and human resource development. A strong commitment from all elements at UNIMED, from leadership to staff, is crucial to ensuring that the process of change runs smoothly. More intensive use of information technology and periodic evaluations of the ZI implementation results will be key to achieving a Corruption-Free Zone (WBK) and a Clean and Serving Bureaucratic Zone (WBBM) within the Postgraduate Program at UNIMED.

References

- [1] Marthalina, M., 2018. Analisis Kualitas Pelayanan Akademik Dan Kepuasan Mahasiswa Di IPDN Kampus Jakarta. *Jurnal MSDM (Manajemen Sumber Daya Manusia)*, pp.1-18.
- [2] Azan, K., Mutu Layanan Akademik (Studi Tentang Pengaruh Pemanfaatan Fasilitas Belajar Dan Kinerja Staf Program Studi Terhadap Mutu Layanan Akademik Program Studi Di Sekolah Pascasarjana Universitas Pendidikan Indonesia). *Jurnal Penelitian Pendidikan UPI*, 15(1), p.139300.
- [3] V. Nanda, (2005). *Quality Management System Handbook for Product Development Companies*. Florida: CRC Press.p-8
- [4] Ramdhan, D.F. and Siregar, H.S., 2019. Manajemen Mutu Perguruan Tinggi Keagamaan Islam Swasta (PTKIS). *Jurnal perspektif*, 3(1), pp.75-109.
- [5] Syukron, B., 2017. Implementasi Manajemen Mutu Terpadu (Studi Transformasi Pada Perguruan Tinggi). *Jurnal Pendidikan Ekonomi Dan Bisnis (Jpeb)*, 5(1), pp.51-62.
- [6] Sufri, M., 2023. Peningkatan Mutu Pada Program Studi Magister Pendidikan Agama Islam UIN Ar-Raniry (Studi Analisa Peluang Dan Tantangan) (Doctoral dissertation, Pasca Sarjana UIN Ar-Raniry).
- [7] Hartanto, C.F.B., Rusdarti, R. and Abdurrahman, A., 2019. Tantangan Pendidikan Vokasi di Era Revolusi Industri 4.0 dalam Menyiapkan Sumber Daya Manusia yang Unggul. In *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS) (Vol. 2, No. 1, pp. 163-171)*.

- [8] Hanafi, A.S., 2020. Pelaksanaan reformasi birokrasi dengan pembangunan zona integritas pada Kementerian Perindustrian. *JIKAP (Jurnal Informasi Dan Komunikasi Administrasi Perkantoran)*, 4(1), pp.31-37.
- [9] Smith, Mary M., and Shaun M. Dougherty. (2024). High School Career and Technical Education Finance: Impact of State-Level Policy Changes. (EdWorkingPaper: 24 -1071). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/e6xs-py44>
- [10] Harmon-Jones, E. and Mills, J., 2019. An Introduction to Cognitive Dissonance Theory and an Overview of Current Perspectives on the Theory.
- [11] Dewi, Y.I. and Hartono, H., 2019, April. Application of a Process Approach in the Ability to Write Persuasive Text: classroom action research. In International Conference on Interdisciplinary Language, Literature and Education (ICILLE 2018) (pp. 466-468). Atlantis Press.
- [12] Wibowo, E.B., 2021. Collaborative Governance in border management policies to support national defense (a case study on the land border of West Kalimantan Province) 093-2103. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), pp.2104-2113.
- [13] Pasiak, P., 2020. Pengembangan Karier Aparatur Sipil Negara (ASN) Berdasarkan Sistem Merit Menurut Undang-Undang Nomor 5 Tahun 2014 Tentang Aparatur Sipil Negara Pada Pemerintah Kota Bitung. *Lex Administratum*, 8(2).
- [14] G.Knowles, (2011). Quality Management. Graeme Knowles & bookboon.com.p-38
- [15] Paraschivescu, A. O., & Āprioarā, F. M. C. (2014). Strategic Quality Management. *Economy Transdisciplinarity Cognition*, 17(1), 19–27.p-19
- [16] Sufri, M., 2023. Peningkatan Mutu Pada Program Studi Magister Pendidikan Agama Islam UIN Ar-Raniry (Studi Analisa Peluang Dan Tantangan) (Doctoral dissertation, Pasca Sarjana UIN Ar-Raniry).
- [17] Dimmera, B.G. and Purnasari, P.D., 2021. Analisis Sistem Penjaminan Mutu Pendidikan Pada SMA yang Terakreditasi A. *Sebatik*, 25(2), pp.367-372.