



Addressing Complaints for Service Improvement: Seafarers' Book Processing at Harbor Master Office Class II Kendari

Arif Fuddin Usman*, Andi Rachmianty, Muhammad Aris Kastian, Andi Ningrat, Andi Ulfiatun and Muslihati

Politeknik Maritim AMI Makassar

*arifusman575@gmail.com

Abstract

Maritime public services play a crucial role in supporting seafarers' mobility and ensuring navigational safety. However, technical and procedural challenges often affect service quality, particularly in the issuance of seamen's books at the Port Authority and Harbor Master Office (KSOP) Class II Kendari. This study aims to evaluate the performance of seamen's book services and propose strategies for service improvement. A quantitative descriptive approach was employed, with data collected from 64 respondents using a questionnaire based on the *SERVQUAL* dimensions. The data were analyzed using the Customer Satisfaction Index (CSI) to measure satisfaction levels and Fishbone Analysis to identify root causes of service problems. The findings revealed a CSI score of 86.22%, categorized as "very satisfied," with the highest performance attributed to staff competence. Nonetheless, several service gaps were identified, including unstable digital infrastructure, a lack of information boards, limited user awareness, and inconsistent staff responsiveness. These results suggest that enhancing digital infrastructure, improving information dissemination, and providing regular staff training are crucial to achieving optimal service quality. In conclusion, the performance of KSOP Class II Kendari has generally met user expectations but requires targeted improvements to strengthen service efficiency and user satisfaction.

Keywords: Public service, seaman's book, KSOP Kendari, Customer Satisfaction Index, Fishbone Analysis

1. INTRODUCTION

Ships, as maritime transportation means, possess significantly larger cargo capacities than other transport modes, making them an efficient choice for large-scale freight logistics [1]. Human resources, along with advancements in modern production technologies and supporting equipment, greatly impact labor absorption within maritime organizations [2]. The success of service delivery in an organization is often reflected in the quality of service provided [3]. Customer satisfaction is a key determinant in ensuring service excellence [4]. Public services in the maritime transport sector play a strategic role in supporting the smooth movement of people and goods, particularly in archipelagic regions such as Indonesia. One essential service is the issuance of the Seafarer's Book, which serves as both an official identity and a record of a seafarer's competencies and work experience. The Harbormaster and Port Authority Office (KSOP) is mandated to ensure that this service operates effectively, efficiently, and in accordance with maritime safety standards. In this context, KSOP Class II Kendari functions as the frontline provider of administrative services for seafarers in Southeast Sulawesi—a key supporting region for national maritime transportation. This institution is responsible for service delivery, supervision, and control of maritime traffic in the port [5].

The seafarer's book is an official document containing a seafarer's physical identity and cannot substitute for a passport [6]. The seafarer's book information system within public services in the maritime sector is an internet/web service-based network system related to the service of issuing seafarer's books. This system is designed so that service users, whether shipping companies or individuals, can directly access the online seafarer's book portal [7]. Although the online-based issuance of seafarers' books has been implemented, several studies indicate that there are still constraints related to service quality, such as server delays, long queues, as well as incomplete information and requirement documents [3]. Other constraints in the online seafarer's book issuance procedure from an administrative perspective include the prevalence of expired



copyright is published under [Lisensi Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).

seafarer certificates, issues with the certificates not being registered online, and the failure to include original documents with the issuance requirements. Consequently, the operator cannot examine the required documents for the online issuance of the seafarer's book [8]. This indicates a gap between the established service standards and the reality in the field. Furthermore, the lack of user knowledge regarding the procedures and the suboptimal responsiveness of employees are also factors that hinder service performance [9]. Therefore, a comprehensive study on the quality of the seafarer's book service is required to identify precise points for improvement.

There has been no study that specifically integrates CSI and Fishbone Analysis to evaluate seafarers' book services at Class II KSOP Kendari. Therefore, the urgency of this research lies not only in the academic aspect but also has a significant impact on improving the quality of public services in the maritime sector. Providing good service will increase user satisfaction, enhance the image of government institutions, and promote shipping safety [10]. Practically, the results of this study are expected to serve as a reference in formulating more effective service improvement strategies at KSOP, especially in facing the challenges of port service digitalization [11].

Based on the problem, this research aims to analyze the level of service performance for seafarer book services at the Class II KSOP (Harbormaster and Port Authority Office) of Kendari and to formulate strategies for service improvement based on the results of the Customer Satisfaction Index (CSI) and Fishbone Analysis. This analysis is expected to provide an objective overview of the service aspects that need to be improved or maintained [12].

2. LITERATURE REVIEW

Service standards in maritime transport encompass various aspects designed to ensure safety, efficiency, and service quality. The implementation of these standards aims to optimize maritime operations and provide satisfaction to all involved parties [13].

To measure the service quality of the attributes within each dimension, the SERVQUAL method is used. This method yields a gap score, which is the difference between customers' perceptions of the service they received and their expectations for the service they expected to receive. The measurement using this method involves assessing the service quality of the attributes for each dimension, resulting in a gap score—the difference between customer perceptions of the service received and their expectations for the service they anticipated [14]. In this context, the research's conceptual framework integrates SERVQUAL dimensions with the Customer Satisfaction Index (CSI) method to assess user satisfaction with the service.

Previous research provides an empirical foundation for this study. Similar research was conducted by Magdalena et al., who measured customer satisfaction with seafarers' book services at the Tanjung Priok Main Harbor Master Office using a qualitative method through observation, interviews, and a Community Satisfaction Index (IKM) survey [4]. Mursalin et al. examined services at the Class IV KSOP (Harbor Master and Port Authority Office) Bagansiapiapi with a qualitative approach, finding convoluted procedures and a lack of information socialization [9]. Melani et al. showed that at the Dumai KSOP, online-based seafarers' book services faced technical and administrative obstacles [3]. The results of another study by Ningrum et al. found that the constraints occurring in the online-based seafarer's book issuance procedure were related to administrative aspects (documents) or technical aspects (equipment and systems) [15].

Although numerous studies have highlighted service quality at various Harbor Master and Port Authority Offices (KSOP), a research gap persists both theoretically and empirically. Most previous studies have focused on measuring user satisfaction without integrating a cause-and-effect analysis of the factors influencing performance. Furthermore, few studies have specifically explored service improvement strategies based on CSI and Fishbone Analysis at the Class II KSOP in Kendari. Therefore, a more comprehensive investigation is required to bridge this gap.

Consequently, this article addresses this void by combining a quantitative CSI approach to measure satisfaction objectively with Fishbone Analysis to identify the root causes of service issues. This analysis provides a deeper understanding of the relationship between technical, human resource, and procedural factors on service quality.

In conclusion, this literature review demonstrates that research on the performance of seafarers' book services at the Class II KSOP in Kendari makes a significant contribution to the development of public service management science. This study not only strengthens the theoretical understanding of SERVQUAL-based service quality but also offers practical recommendations for improving the quality of maritime services in Indonesia.



3. METHODS

This study employs a quantitative approach with a descriptive method to analyze the performance of seafarers' book services at the Class II KSOP (Harbor Master and Port Authority Office) in Kendari. The quantitative approach was selected for its ability to provide an objective overview through numerical measurement of the researched variables, namely service quality based on user perceptions.

The research was conducted at the Class II KSOP in Kendari, Southeast Sulawesi, which serves as the central administrative service center for seafarers in the region. Data collection was carried out from August 2023 to February 2024, a timeframe deemed sufficient to capture variations and obtain representative data.

The study population consisted of all users of seafarers' book issuance services at the Class II KSOP Kendari over the past six months, totaling 180 individuals, including ship agents, ship crew, and maritime cadets. The sample was determined using a purposive sampling technique, with the criterion that respondents must have used the service during the research period. The sample size was set at 64 respondents, calculated using the Slovin formula with a 10% margin of error, to ensure adequate representation of the population.

The research instrument was a questionnaire developed based on the SERVQUAL service quality dimensions (tangibles, reliability, responsiveness, assurance, and empathy), which are relevant to the context of maritime public services [16]. The method employed was the ServQual (Service Quality) method to identify and assess the service quality of each dimension's attributes using a questionnaire as the medium to obtain the necessary data [14].

This ServQual model defines the gap (G) for a specific service quality factor as: $\text{Gap} = P (\text{perceptions}) - E (\text{expectations})$. A negative gap value indicates that customer expectations were not met; the larger the gap, the wider the disparity between customer desires and the actual service they received [17]. The instrument's validity was tested through item-total correlation, and all question items were declared valid. Reliability was tested using Cronbach's Alpha coefficient, which indicated a high level of reliability. Data collection techniques were carried out through field observation, the direct distribution of questionnaires to respondents, and documentation to supplement the primary data.

Data analysis was performed using the Customer Satisfaction Index (CSI) method to quantitatively calculate the level of user satisfaction. Subsequently, Fishbone Analysis was used to identify the root causes of service problems. Data processing was conducted manually with the aid of simple statistical software to ensure the accuracy of the analytical results. The combined approach of CSI and Fishbone Analysis enables the identification of service aspects requiring improvement and facilitates the precise formulation of strategies to enhance service performance [18].

4. RESULTS AND DISCUSSION

The results of the analysis on the performance of seafarers' book services at Class II KSOP Kendari indicate a very high level of user satisfaction. Based on the Customer Satisfaction Index (CSI) calculation, a value of 86.22% was obtained, which falls into the "Very Satisfied" category. The service attribute with the highest score was officer competence in providing service, with a weighted score of 111.6, as shown in Table 1. This finding indicates that staff expertise is a dominant factor in enhancing user satisfaction.

Table 1. Service Quality (SERVQUAL) and Customer Satisfaction Survey Results

No	Statements	MIS	MSS	WF	WS
<i>Section A: Tangibles & Physical Facilities</i>					
1.	To what extent are the seafarers' book waiting and registration areas comfortable?	4,27	4,44	3,82	3,82
2.	How clean and organized is the service area for users interacting with officers?	4,30	4,11	3,85	3,85
3.	Is there adequate parking provision for service users?	4,33	4,57	3,88	3,88
4.	Does the facility provide sufficient accessibility features, such as internet access or Wi-Fi services?	4,06	4,24	3,64	3,64
5.	Are there adequate facilities for users to rest or wait, such as comfortable seating?	4,11	4,27	3,68	3,68
6.	Are there clean and well-maintained toilet facilities available?	3,98	4,20	3,57	3,57



No	Statements	MIS	MSS	WF	WS
7.	Are officers available to assist users with inquiries or emerging problems?	4,03	4,38	3,61	3,61
8.	Does the service facility have an organized and efficient queuing system?	4,08	4,17	3,65	3,65
9.	Does the service area provide good air quality, such as adequate ventilation or air fresheners?	4,29	4,27	3,84	3,84
10.	Does the facility provide amenities for user comfort, such as a non-smoking area or a designated separate smoking zone?	3,92	4,13	3,51	3,51
<i>Section B: Reliability & Process Efficiency</i>					
11.	Is the procedure for registering seafarers' book services clearly communicated and understandable?	3,98	4,33	3,57	3,57
12.	Do the officers provide accurate and complete information?	4,30	4,41	3,85	3,85
13.	Is the process for Non-Tax State Revenue (PNBP) payments quick and easy?	4,08	4,25	3,65	3,65
14.	Do officers provide equal attention to all service users, regardless of gender, age, or background?	4,25	4,54	3,81	3,81
15.	Do officers deliver services promptly?	4,08	4,25	3,65	3,65
16.	Are officers prepared to assist when users experience difficulties?	4,17	4,35	3,74	3,74
17.	Do officers provide a quick and efficient response to user inquiries or problems?	4,05	4,33	3,62	3,62
18.	Do officers respond to user feedback or complaints politely and professionally?	3,98	4,19	3,57	3,57
19.	Do officers listen attentively and ask relevant questions to understand the user's needs?	3,95	4,22	3,54	3,54
20.	Do officers offer suggestions or recommendations that can assist users in decision-making?	4,08	4,09	3,65	3,65
21.	Are the service officers proficient in their field and sufficiently experienced?	4,31	4,51	3,86	3,86
22.	Are the results of the health check-up precise and accurate?	3,98	4,32	3,57	3,57
23.	To what extent does the service provided comply with all applicable laws, regulations, and relevant ethical standards?	4,30	4,28	3,85	3,85
24.	How well does the service system function, and does it meet established standards?	4,14	4,28	3,71	3,71
<i>Section C: Courtesy & Responsiveness</i>					
25.	Do officers proactively inquire about the needs of newly arrived service users?	4,21	4,38	3,77	3,77
26.	Do officers consistently apply the principles of greeting, smiling, and acknowledging (salam, senyum, sapa)?	4,23	4,37	3,79	3,79
27.	Do officers greet or acknowledge users in a friendly manner upon their entry to the service facility?	4,17	4,48	3,74	3,74
Total		111,6			
<i>Weight Total (WT)</i>					431,10
<i>Customer Satisfaction Index (CSI)</i>					86,22%

Although the Customer Satisfaction Index (CSI) indicates a high level of satisfaction, the Fishbone Analysis presented in Figure 1 below reveals that the most significant satisfaction gap resides in the categories of Tools (physical facilities) and People (human resources).

Strategic enhancements should, therefore, be prioritized in the following areas:

- Tools/Materials: Improvements to toilet cleanliness, refurbishment of waiting chairs, enhancement of ventilation systems, and upgraded internet access.
- People: Training programs focused on communication skills, empathy, and effective response to complaints.
- Process: Digitalization of the queuing system and streamlining of operational procedures.



copyright is published under [Lisensi Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



Figure 1. Fishbone Diagram of Root Cause Analysis for Customer Satisfaction Index (CSI) at 86.22%

The discussion of these findings demonstrates alignment with the SERVQUAL service quality theory, where aspects of reliability and responsiveness are key determinants of customer satisfaction. These results are also consistent with studies by Melani et al. (2023) and Mursalin et al. (2021), which highlight technical constraints and human resource factors in services at Harbor Master and Port Authority (KSOP) offices. However, this study provides further contribution by identifying root causes through Fishbone Analysis, which has rarely been employed in previous research. Practically, these findings suggest the need to enhance digital infrastructure, provide staff training, and improve the availability of clear information to optimize service processes.

The limitation of this study lies in the sample coverage, which involved only 64 respondents from a single research location, thus limiting the generalizability of the findings. Additionally, the analysis focused solely on satisfaction dimensions without examining causal relationships with other factors, such as organizational culture or managerial policies.

Based on these findings, future research is recommended to expand the scope of locations, incorporate additional variables such as the effectiveness of service policies, and employ more complex analytical approaches, for instance, Structural Equation Modeling (SEM), to examine inter-variable relationships. This approach would enrich the understanding of factors influencing the quality of public services in the maritime sector.

5. CONCLUSION

Research findings indicate that the performance of seafarer book services at Class II KSOP Kendari is in the “very satisfied” category, with a Customer Satisfaction Index (CSI) value of 86.22%. This finding demonstrates that, in general, the service has met user expectations.

However, a Fishbone analysis revealed constraints in technical aspects, limitations in facilities, insufficient information socialization, and a lack of officer preparedness in certain specific situations. These findings provide answers to the research objectives, which were to assess service performance and formulate improvement strategies based on the analysis results.

Based on these results, it is recommended that Class II KSOP Kendari enhance the maintenance of technological infrastructure, improve service information flow, and provide regular training for officers to increase service responsiveness. For subsequent research, it is advised to expand the study location to several other KSOP offices and employ a more comprehensive analysis method, such as Structural Equation Modeling (SEM), to test causal relationships between variables.

ACKNOWLEDGMENTS

The researchers would like to extend their gratitude to the Class II KSOP (Harbormaster and Port Authority Office) of Kendari for their support during the data collection process, as well as to all participants who took



copyright is published under [Lisensi Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).

part in this study. Appreciation is also expressed to the supervising lecturer and the institution, AMI Maritime Polytechnic of Makassar, for their guidance throughout the implementation of this research.

REFERENCES

- [1] Andi Ningrat, Mutmainna Mutmainna, Rusnaedi Rusnaedi, Arif Fuddin Usman, and Muslihati Muslihati, "Strategi Peningkatan Keselamatan dan Kesehatan Kerja pada Kepanduan di Pelabuhan Semayang PT. Pelindo Balikpapan," *Ocean Engineering: Jurnal Ilmu Teknik dan Teknologi Maritim*, vol. 3, no. 2, pp. 155–165, Jun. 2024, doi: 10.58192/ocean.v3i2.2529.
- [2] A. F. Usman, F. A. Wajdi, A. Ningrat, A. Rachmianty, and A. Murtafiah, "Enhancing Employee Productivity: The Impact of Occupational Safety, Health, and Work Discipline at PT. Pelindo Parepare," 2024, pp. 38–50. doi: 10.2991/978-94-6463-628-4_5.
- [3] A. Melani, D. Erlianti, and L. Wahyuni, "Analisis Kualitas Pelayanan dalam Pengurusan Buku Pelaut Pada Kantor Kesyahbandaran dan Otoritas Pelabuhan Kelas I Dumai," *Jurnal Administrasi Publik dan Bisnis*, vol. 5, no. 2, pp. 85–92, Sep. 2023, doi: 10.36917/japabis.v5i2.100.
- [4] S. Magdalena *et al.*, "Pengukuran Kepuasan Pelanggan dalam Pelayanan Buku Pelaut di Kantor Kesyahbandaran Utama Tanjung Priok.," *Journal Marine Inside*, pp. 67–71, Dec. 2024, doi: 10.62391/ejmi.v6i2.94.
- [5] N. Ahyana, R. Kusmaladi, and N. Fadliana, "Evaluasi Implementasi Sistem Inaportnet dalam Pelayanan Clearance in Kapal di KSOP Utama Makassar," *Jurnal Minfo Polgan*, vol. 14, no. 1, pp. 973–980, Jun. 2025, doi: 10.33395/jmp.v14i1.14946.
- [6] D. B. Y. Putra, I. Sianturi, F. Asdiana, and M. Rahmawati, "Pengaruh Penerapan Sistem Buku Pelaut Online Terhadap Proses Penerbitan Buku Pelaut di Kantor Kesyahbandaran dan Otoritas Pelabuhan Utama Tanjung Perak Surabaya," *Jurnal Maritim Malahayati*, vol. 6, no. 1, pp. 302–308, Jan. 2025, doi: 10.70799/jumma.v6i1.114.
- [7] L. Sutriana, "Sistem Informasi Buku Pelaut dalam Pelayanan Publik di Bidang Kepelautan," *Asia-Pacific Journal of Public Policy*, vol. 8, no. 2, pp. 96–107, Dec. 2022, doi: 10.52137/apjpp.v8i2.139.
- [8] Janoko, R. N. Istiari, and J. Samudra, "Prosedur Penerbitan Buku Pelaut Online pada Kesyahbandaran dan Otoritas Pelabuhan Tanjung Wangi," *Jurnal Kemaritiman dan Transportasi*, vol. 4, no. 2, pp. 93–103, 2022, Accessed: Apr. 03, 2026. [Online]. Available: <https://ejournal1.akaba-bwi.ac.id/ojs/index.php/discovery>
- [9] M. Mursalin, M. Heriyanto, and F. Yuliani, "Kinerja Pelayanan Publik pada Kantor Kesyahbandaran dan Otoritas Pelabuhan (Ksop) Kelas Iv Bagansiapiapi," *Pro Patria: Jurnal Pendidikan, Kewarganegaraan, Hukum, Sosial, dan Politik*, vol. 4, no. 2, pp. 232–249, Aug. 2021, doi: 10.47080/propatria.v4i2.1431.
- [10] H. Hasan, A. W. Kamma, and I. Baharuddin, "Analisis Responsivitas Pegawai Syahbandar di Kantor Unit Penyelenggara Pelabuhan Kelas Iii Soasio dalam Pelaksanaan Pelayanan Sesuai Tugas Pokok dan Fungsi," *Jurnal Inovasi Penelitian*, vol. 3, no. 11, pp. 7929–7936, 2023.
- [11] Asmiati, Sulastriani, and A. Batara Citta, "Pengembangan Sumber Daya Manusia dalam Mendukung Transformasi Transportasi Laut Dalam Era Revolusi Industri 4.0," 2023. Accessed: Apr. 03, 2026. [Online]. Available: <https://j-innovative.org/index.php/Innovative>
- [12] W. Lausu, D. M. Liando, and W. Waworundeng, "Inovasi Program E-Tiket dalam Meningkatkan Kualitas Pelayanan Publik di Pelabuhan Laut Manado," *Jurnal Governance*, vol. 3, no. 1, 2023.
- [13] A. Ningrat, A. Tahir, Rusnaedi, Reskyani, and Muslihati, "Optimizing Container Crane Performance: Enhancing Loading and Unloading Productivity at PT. Kaltim Kariangau Terminal," *Indonesian Journal of Maritime Technology*, vol. 2, no. 2, Dec. 2024, doi: 10.35718/ismatech.v2i2.1264.
- [14] N. M. Rahman, M. Basuki, and E. Pranatal, "Analisis Pelayanan Penumpang pada Terminal Penumpang Gapura Surya Nusantara Menurut Pm 37 Tahun 2015 dengan Metode Servqual (Service Quality)," *Jurnal Sumberdaya Bumi Berkelanjutan (SEMITAN)*, vol. 1, no. 1, pp. 408–414, Aug. 2022, doi: 10.31284/j.semitan.2022.3232.



copyright is published under [Lisensi Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).

- [15] N. L. Ningrum, G. Satriyo, and I. K. Wahyudi, "Implementasi Sistem Penerbitan Seaman Book Berbasis Online dalam Penggantian Awak Kapal," *Jurnal Kemaritiman dan Transportasi*, vol. 4, no. 2, pp. 59–69, 2022.
- [16] I. Sukati, N. Elfi Husda, and Y. Wangdra, "Logistics Service Quality and Customer Satisfaction: Evidence from Salalah Port, Oman," *Journal of Ecohumanism*, vol. 3, no. 6, pp. 1–20, 2024, doi: 10.62754/joe.v3i6.388710.62754.
- [17] Wahyu Wibowo and Imam Nuryanto, "Analisis Kualitas Pelayanan Publik dengan Metode Integrasi Servqual dan Diagram Kartesius," *E-Bisnis : Jurnal Ilmiah Ekonomi dan Bisnis*, vol. 15, no. 1, pp. 195–200, Jul. 2022, doi: 10.51903/e-bisnis.v15i1.808.
- [18] M. Cox and K. Sandberg, "Modeling Causal Relationships in Quality Improvement," *Curr. Probl. Pediatr. Adolesc. Health Care*, vol. 48, no. 7, pp. 182–185, Jul. 2018, doi: 10.1016/j.cppeds.2018.08.011.

