

# **EVALUATION OF THE OFFICER'S BEHAVIOR IN PUBLIC SERVICES OF NUCLEAR MINERALS TECHNOLOGY**

**Nunik Madyaningarum<sup>1</sup>, IH Pratama<sup>1</sup>**

1) Center for Nuclear Material Technology  
National Nuclear Energy Agency, Jakarta

\*Corresponding author: nunikarum@gmail.com

## **ABSTRAK**

**EVALUASI PERILAKU PETUGAS DALAM LAYANAN PUBLIK TEKNOLOGI MINERAL NUKLIR.** Perilaku layanan didefinisikan secara umum sebagai perilaku layanan yang merujuk pada deskripsi pekerjaan resmi, skrip layanan, dan menyelesaikan tugas layanan inti menggunakan prosedur layanan standar. Evaluasi perilaku petugas layanan memiliki peluang untuk memicu peningkatan kualitas layanan yang berkelanjutan untuk meningkatkan data kinerja-primer organisasi dari 73 kuesioner, yang merupakan hasil penilaian kepuasan pelanggan layanan teknologi mineral nuklir. Analisis data menggunakan statistik frekuensi deskriptif yang menyediakan kondisi khas keanekaragaman data. Hasil evaluasi perilaku menunjukkan bahwa petugas layanan sopan, tidak selektif; semua pelanggan memiliki posisi yang sama, petugas menyelesaikan layanan sesuai periode yang disepakati, petugas melengkapi layanan mengikuti persyaratan layanan. Penelitian ini memberikan bukti bahwa ketidakpastian dalam melayani pelanggan membutuhkan karyawan garis depan untuk mengambil inisiatif pribadi untuk mengantisipasi kebutuhan pelanggan, mencegah dan menghilangkan potensi hambatan dalam pemberian layanan, dan terus menerus mengidentifikasi peluang baru untuk meningkatkan kualitas layanan.

Kata kunci: evaluasi, layanan, perilaku, petugas, publik

## **ABSTRACT**

**EVALUATION OF THE OFFICER'S BEHAVIOR IN PUBLIC SERVICES OF NUCLEAR MINERALS TECHNOLOGY.** Service behavior is defined generally as service behavior that refers to official job descriptions, service scripts, and completes core service tasks using standard service procedures. Evaluation of the behavior of service officers has the opportunity to trigger continuous improvement in service quality to improve organizational performance-primary data from 73 questionnaires, which are the result of customer satisfaction assessment of nuclear mineral technology services. Data analysis used descriptive frequency statistics that provide a typical condition of the diversity of data. The behavioral evaluation results show that service personnel is polite, not selective; all customers have the same position, officers complete services according to the agreed period, officers complete services following service requirements. This research provides evidence that uncertainty in serving customers requires frontline employees to take personal initiative to anticipate customer needs, prevent and eliminate potential obstacles in service delivery, and continuously identify new opportunities to improve service quality.

*Key words: behavior, evaluation, officer, public, services*

## **INTRODUCTION**

In the industrial era, as it is today, companies that compete are increasingly high, as is the case with increasingly fast competition [1]. Therefore, organizations in

every industry strive to grow their business through the process of using sophisticated technology, and at the same time, they change the business focus from product-centric to customer centric [1]. The focus on the customer is very careful with customer

satisfaction, which will reflect the quality of service. A customer or satisfied customer is a customer who receives value from a supplier or service provider [2]. This value can be created from company marketing attributes such as products, services, systems, or goals that are emotional and can be a stimulus to encourage consumers in purchasing [2]. Service is any action or activity that can be offered by a party to another party, which is basically intangible and has no ownership whatsoever [3]. Service is a producer in order to meet the needs and desires of consumers for the achievement of consumer satisfaction itself [2]. The conceptualization of service interactions is the content and nature of interpersonal interactions between service providers and customers [4,5,6]. Service behavior related to employees who serve customers with gestures, voice, and attitude [7]. Service behavior refers to general services that involve job descriptions and official service scripts and complete service tasks using standard service procedures [8]. Employees or service officers are essential for service provider organizations [5,6]. Empirical evidence shows if service personnel provide high-quality services, customers who provide services that support meeting services, increase higher satisfaction, and increase their purchases and frequency of visits in the future [6]. Their assistance to work on formal service roles as well as to meet rapidly changing customer expectations is crucial for adequate service provision [8]. Therefore, the role of service personnel plays an important role in shaping customer perceptions about service quality [9].

Public services of nuclear minerals technology provide services to various parties, both from internal and external agencies. The types of services provided are in the form of visits to nuclear facilities and expert visits ( $K_1$ ), student services for practical work, and final assignments ( $K_2$ ), in addition to providing nuclear expertise ( $K_3$ ), and as well as processing and exploration services ( $K_4$ ). In conducting services quickly, precisely, and with quality, service personnel must understand the requirements, procedures, completion period, rates, and service products. In addition to those elements, implementing competencies, implementing behavior, service announcements, and handling complaints, suggestions, and input are things that must be

considered by service providers. The element that is discussed in this paper is the officer's behavior.

Previous research has linked the personality of service personnel with the performance of their services [6]. In the implementation of service delivery, the officer's behavior is influenced by the organization's concern to improve service quality and employee welfare [10]. Therefore organizations must have standards in providing services so that the quality of service can be assessed, evaluated, and improved continuously. In assessing the quality of service technology for nuclear minerals, the element of the behavior of service personnel in each type of service focuses on attitudes when serving, responsibility in providing services, discipline in completing services and equality of treatment to all parties in providing services [11].

Previous literature provides support that service officer behavior is related to personality and influences service performance [2,6,10] and organization performance [4,8,12]. Therefore an evaluation of the behavior of nuclear material technology service officers needs to be done to get active to improve the quality of sustainable service.

## **METHODOLOGY**

This study used questionnaires as a quantitative approach descriptively to describe the characteristics of observational groups or can be used to draw conclusions, which use data from sample groups to generalize about larger groups or populations [13]. This study uses questionnaires as a form of quantitative approach descriptively to describe the characteristics of observational groups or can be used to draw conclusions, which use data from sample groups to generalize about larger groups or populations [14]. The data types used in this study are primary and secondary data. Primary data obtained through questionnaires from respondents. Respondents in this study were users of all types of services available. Teachers, local government, and IAEA experts are customers of facility visits and expert visits. Vocational high school (SMK) students and students from various levels are customers of student services for practical work and final assignments. State-owned enterprises and

members of the rare-earth elements (REE) consortium are customers of nuclear expertise services as well as mineral processing and exploration services. Secondary data obtained from previous research literature studies and regulations. Primary data is obtained from 73 questionnaires given to respondents, reflecting a 100% rate of return. It indicates that the data analyzed is not biased because the rate of return is more than 30-40 [15]. Besides, any research based on the measurement of variables must pay attention to accuracy and dependence [16]. Secondary data is used to determine the variables in the questionnaire; in particular, the behaviour of service personnel.

The data analysis of this study used statistical methods with the Statistical Package for the Social Sciences (SPSS) program. Statistics is a broad mathematical discipline that deals with techniques for the collection, analysis, interpretation, and presentation of numerical data. Data is the information used for reasons, discussions or calculations; data is the basis of modern scientific inference [17]. Statistical analysis is a useful strategy that allows us to reduce the data collected into summary figures, thus allowing us to make meaning from the results of the assessment [13]. The statistical method used is descriptive frequency analysis. Descriptive analysis is probably the most straightforward statistical analysis to do and interpret. Descriptive statistics provide us with a useful strategy for summarizing data and providing sample descriptions but cannot provide information for causal analysis [13]. Frequency statistics are the main descriptive statistics used with discrete variables. These include absolute frequencies (raw quantities) for each category of discrete variables, relative frequencies (proportions or percentages of the total number of observations), and cumulative frequencies for successive categories of ordinal variables [17].

Determination of variables in this study is based on the behavior of service personnel in carrying out service functions following PERKA BATAN No. 13 of 2017 concerning Public Service Standards. The analyzed variables can be seen in Table 1. The choice of answers in the questionnaire illustrates the level of customer acceptance of the behavior of officers in serving.

Table 1. Research Variables

Variables	Code
The Attitudes and behavior of service officers	UP1
Discipline Officers in completing services	UP2
Officers are responsible for providing services	UP3
Similarities in the treatment of services for the same type of service to all served parties	UP4

## RESULT AND DISCUSSION

The respondents in this survey are 73, who are users of all types of nuclear minerals technology services. Data tabulation based on the type of service they use can be seen in Figure 1. Respondents fill out questionnaires based on their experience using nuclear minerals technology services.

This questionnaire is intended to get responses from customers regarding the behavior of service personnel during service. The scale used is the ordinal scale which is a hierarchy so that all cases can be sorted from lowest to highest score (ranking sorted by rank) [13]. The ordinal scale on the questionnaire is from those who strongly agree with a value of 4 (four) to disagree with a value of 1 (one) strongly. Strongly agree to show if the service variable following implementation, while strongly disagree illustrates that the service variable does not match those obtained by the customer. Respondents' answers for all service variables are 4 for the maximum value and 1 for the minimum value. Summary of the questionnaire results shown in Table 2.

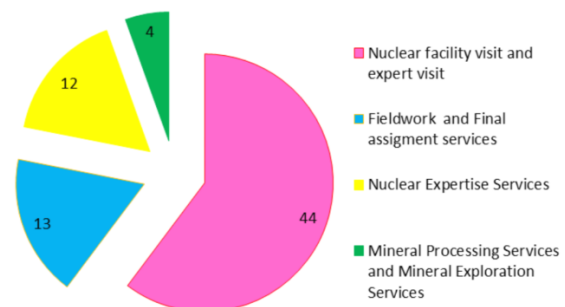


Figure 1. Respondent tabulation

Table 2. Summary of the questionnaire results

Variable	N	Minimum	Maximum	Modus
UP1	73	1.00	4.00	4.00
UP2	73	1.00	4.00	4.00
UP3	73	1.00	4.00	4.00
UP4	73	1.00	4.00	3.00

In frequency descriptive analysis the arrangements and summarized data were presented in tabular form which lists data values that may be different (either individually or by grouping) together with the appropriate frequency, which represents the number of times these values occur. This frequency distribution has shown a typical picture of data diversity [18]. The nature of data diversity was fundamental to know because, in subsequent statistical tests, we must always pay attention to the nature of data diversity. Regardless of the nature of data diversity, concluding is generally invalid. Here are the results of the calculation of frequency descriptive statistics for each service variable:

The first variable regarding the Attitudes and behavior of service officers (P1) can be seen at table 3 and 4, in the facility and questionnaire visits of experts (K1) as many as 25 respondents or 59.5% gave ratings strongly

agree, and 1 or 2.4% of respondents gave ratings strongly disagree. On student services for practical work and final assignments (K2), as many as 11 or 84.6% of respondents gave ratings strongly agree, and 2 or 15.4% of respondents gave ratings agree. Nuclear Expertise Questionnaire (K3), 7 or 58.3% of respondents agreed, and 5 or 41.7% of respondents rated strongly agree. In the processing services questionnaire and exploration services for nuclear material (K4) there are only 1 or 25% of respondents who expressed strongly agree while 3 or 75% said they agreed the service officers were pleasant. Based on data from the overall results of the questionnaire can be interpreted that the officers provide services politely, not selectively cut, and all customers have the same position.

Table 3. Result of UP1 K1 and K2

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	1	2.4	-	-
Agree	16	38.1	2	15.4
Strongly agree	25	59.5	11	84.6
Total	42	100	13	100

Table 4. Result of UP1 K3 and K4

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	-	-	-	-
Agree	7	58.3	3	75
Strongly agree	5	41.7	1	25
Total	12	100	4	100

Table 5. Result of UP2 K1 and K2

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	1	2.4	-	-
Disagree	-	-	-	-
Agree	15	35.7	7	53.8
Strongly agree	26	61.9	6	46.2
Total	42	100	13	100

Table 6. Result of UP2 K3 and K4

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	-	-	-	-
Disagree	-	-	1	25
Agree	8	66.7	2	50
Strongly agree	4	33.3	1	25
Total	12	100	4	100

The second variable regarding disciplinary officers in completing services (P2) can be seen in tables 5 and 6, as many as

37 respondents gave ratings strongly agree, 32 respondents gave ratings agreed, 1 respondent disagreed and 1 respondent strongly disagreed

if disciplined service officers in completing services. Based on these data, it can be interpreted that the majority of customers feel that the officers complete the service following the agreed timeframe.

The third variable about the officers responsible for providing services (P3) can be seen in Tables 7 and 8, as many as 28 or 66.7% of K1 respondents assessed strongly agree, 32 respondents gave an agreed assessment, 13 or 31% of respondents agreed and 1 or 2, 4% of respondents strongly disagree. In the K2 Questionnaire, as many as 6 or 46.2% of

respondents gave ratings strongly agreed, 7 or 53.8% of respondents gave ratings agreed. K3 Questionnaire, as many as 3 or 37.5% of respondents gave ratings strongly agree, 5 or 62.5% of respondents gave ratings agree. For K4 Questionnaire as many as 1 or 25% of respondents gave ratings strongly agree, 3 or 75% of respondents gave ratings agreed. Based on data from the overall results of the Questionnaire can be interpreted that the officer completed the service following the service requirements.

Table 7. Result of UP3 K1 and K2

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	1	2.4	-	-
Agree	13	31	7	53.8
Strongly agree	28	66.7	6	46.2
Total	42	100	13	100

Table 8. Result of UP3 K3 and K4

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	-	-	-	-
Agree	5	62.5	3	75
Strongly agree	3	37.5	1	25
Total	8	100	4	100

Table 9. Result of UP4 K1 and K2

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	1	2.4	-	-
Agree	16	39	7	53.8
Strongly agree	24	58.5	6	46.2
Total	41	100	13	100

Table 10. Result of UP4 K3 and K4

Criteria	K1		K2	
	Frequency	Percentage	Frequency	Percentage
Strongly disagree	-	-	-	-
Agree	8	66.7	2	66.7
Strongly agree	4	33.3	1	33.3
Total	12	100	3	100

Table 11. The summary of result analysis

Variables	Result			
	Strongly agree	Agree	Disagree	Strongly disagree
UP1	42	28	0	1
UP2	37	32	1	1
UP3	38	28	0	1
UP4	35	33	0	1

The fourth variable about the Similarities in the treatment of services for the same type of service to all served parties (P4) can be seen in tables 9 and 10, as many as 35

respondents gave ratings strongly agree, 33 respondents gave ratings agreed, and 1 respondent strongly disagreed. Based on this data, it can interpret that the majority of

customers feel that the officers provide selective services, and all customers have the same position, even though there are 1 or 2.4% of customers who feel there is a difference in service delivery.

The overall results of data analysis can be seen in Table 11. The purpose of this study is to evaluate the behaviour of service personnel. The data used comes from the assessment of 73 respondents of service customers. All service personnel behaviour variables get positive ratings from the majority of customers, although some customers give the opposite value.

## CONCLUSION

The officers provide services politely, not selective, and all customers have the same position, the officers complete the service following the agreed period, the officers complete the service following the service requirements and the officers provides the service with no selective logging. All customers have the same position, and those are the result of evaluating the performance of officers in providing nuclear minerals technology services. These results provide opportunities to improve service performance with all the uncertainties in serving customers requiring frontline employees to take personal initiative to anticipate customer needs, prevent and eliminate potential obstacles in service delivery before problems "emerge," addressing the root causes of service problems so that the problem does not recur, following up continuously on issues that can affect customer service, challenging the ways that are tried and tested in providing services, and continuously identifying new opportunities to improve service quality. In other words, evaluating the behaviour of service personnel has the opportunity to trigger continuous improvement in service quality to improve organizational performance.

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