

# Study of Service Quality and Public Satisfaction with Dapodik Administrative Services at the Bontang City Education and Culture Office

## *Studi Kualitas Layanan dan Kepuasan Masyarakat terhadap Layanan Administrasi Dapodik di Dinas Pendidikan dan Kebudayaan Kota Bontang*

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### Abstract

This study examines public satisfaction with the Core Education Data System (Dapodik) administrative services at the Bontang City Education and Culture Office, focusing on the factors that shape user perceptions and the service-quality dimensions most in need of improvement. Using a quantitative descriptive design with an evaluative survey approach, the study applies the Public Satisfaction Survey (SKM) framework established under Regulation of the Minister of Administrative and Bureaucratic Reform of the Republic of Indonesia No. 14 of 2017, integrated with the SERVQUAL model's five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Data were collected from 152 school operators across various educational levels via a structured questionnaire distributed through Google Forms, using a four-point Likert scale (1 = dissatisfied to 4 = very satisfied) and a proportional quota sampling method. Statistical analysis comprised the SKM computational model for satisfaction indexing, descriptive statistics for indicator-level scores, and multiple linear regression to identify the most influential service-quality predictors. The overall satisfaction index falls in the "Good" (Baik) category, indicating that while the service system and technology function adequately, several service dimensions have not yet met user expectations. Among the nine service indicators, assurance and competence scored highest, reflecting users' confidence in staff professionalism and reliability, while responsiveness, reliability, and complaint handling scored lowest, pointing to delays and inconsistency in service delivery. The study concludes that improving Dapodik users' satisfaction requires more than procedural and technological gains: continued attention to responsiveness and empathy in service delivery is essential.

### Keywords

Public Satisfaction; Dapodik Administrative Services; Service Quality.

### Abstrak

Penelitian ini mengkaji kepuasan masyarakat terhadap layanan administrasi Data Pokok Pendidikan (Dapodik) di Dinas Pendidikan dan Kebudayaan Kota Bontang, dengan fokus pada faktor-faktor yang memengaruhi persepsi pengguna serta dimensi kualitas layanan yang perlu ditingkatkan. Menggunakan desain penelitian deskriptif kuantitatif dengan pendekatan survei evaluatif, penelitian ini menerapkan kerangka Survei Kepuasan Masyarakat (SKM) sebagaimana diatur dalam Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 14 Tahun 2017, yang diintegrasikan dengan lima dimensi model SERVQUAL: bukti langsung, keandalan, daya tanggap, jaminan, dan empati. Data dikumpulkan dari 152 operator sekolah dari berbagai tingkatan pendidikan melalui kuesioner terstruktur yang didistribusikan melalui Google Forms, menggunakan skala Likert empat poin (1 = tidak puas hingga 4 = sangat puas) dan metode penarikan sampel kuota proporsional. Analisis statistik meliputi model komputasi SKM untuk pengindeksan kepuasan, statistik deskriptif untuk skor rata-rata per indikator, dan analisis regresi linier berganda untuk mengidentifikasi prediktor kualitas layanan yang paling berpengaruh. Indeks kepuasan total berada pada kategori "Baik," yang menunjukkan bahwa meskipun sistem dan teknologi yang digunakan telah beroperasi dengan memadai, masih terdapat beberapa dimensi layanan yang belum mencapai harapan pengguna. Di antara sembilan indikator layanan, jaminan dan kompetensi menempati nilai rata-rata tertinggi, mencerminkan kepercayaan pengguna terhadap profesionalisme dan keandalan staf, sementara daya tanggap, keandalan, dan penanganan keluhan



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*memperoleh nilai terendah, yang mengindikasikan adanya keterlambatan dan inkonsistensi dalam kinerja layanan. Penelitian ini menyimpulkan bahwa peningkatan kepuasan pengguna Dapodik memerlukan lebih dari sekadar perbaikan prosedural dan teknologi; perhatian berkelanjutan terhadap daya tanggap dan empati dalam pemberian layanan tetap esensial.*

#### **Kata Kunci**

*Kepuasan Masyarakat; Layanan Administrasi Dapodik; Kualitas Layanan.*

## **1. Introduction**

Public service delivery is one of the core measures used to evaluate the effectiveness of governance systems in modern democratic states. Effectiveness in terms of public service delivery is largely indicative of the level at which the efficiency, responsiveness, and appropriateness of service provision is attained. As far as local governance in Indonesia is concerned, local governments assume a key position as the front line service providers who have direct dealings with citizens. It is upon such service delivery that the attainment of good governance principles such as transparency, accountability, responsiveness, and participation depends (Birdayanthi et al., 2025; Sari, 2023). In the education sector, data management and administrative services have become increasingly strategic as the government's focus on evidence-based policymaking increases. Among various innovations in educational administration, the Data Pokok Pendidikan [Core Education Data System] (Dapodik) has emerged as a central instrument for integrating and managing education data at the national level (Mubarok & Samran, 2025).

The Dapodik system is a digital database that consolidates information on students, educators, institutions, infrastructure, and financial resources in the education sector. Developed by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, this system serves as the primary data source for various policy instruments, including school operational assistance funding, teacher certification, scholarships, and education resource allocation (Widati et al., 2024). Due to its crucial role, Dapodik is not simply a technical platform but also an embodiment of public service innovation in education administration (Punuh et al., 2023). Local education offices, such as the Bontang City Education and Culture Office, serve as regional administrators responsible for facilitating, validating, and maintaining the accuracy of Dapodik data, in collaboration with school administrators (Rodiyah et al., 2024). Therefore, the effectiveness of Dapodik services at the regional level influences not only data management efficiency but also user satisfaction, particularly school administrators who rely on the system for their daily administrative work (Öznacar & Dericioğlu, 2017).

The Dapodik service at the Bontang City Education and Culture Office has evolved into a public service unit that connects school administration needs with the broader national data management framework. The service process encompasses various activities such as technical guidance, data verification and validation, account management, application troubleshooting, and policy dissemination. According to the theory, such measures should help in obtaining relevant and up-to-date data on education which would be used in formulating public policies. But the provision of such services is faced with various constraints associated with the human resources, technical issues, time response, and communication infrastructure. All these might have an effect on the overall degree of user satisfaction in this case, which means users who operate educational institutions in Bontang City (Febriaryanti, 2023; Jusmaryanti et al., 2024; Wattimena et al., 2025).

Public satisfaction is an important indicator of service performance within the framework of bureaucratic reform. Customer satisfaction is a function of perceived service performance compared to initial expectations (Ali et al., 2015; Özkan et al., 2019). If performance exceeds expectations, satisfaction is achieved, but if the performance fails to meet expectations, dissatisfaction is created. The same concept applies to public services, where satisfaction depends on how well the citizens' expectations have been met with the services provided by the government (Edelenbos et al., 2021; Guo & Dong, 2024; Li et al., 2024). In the specific context of Dapodik administration, user satisfaction reflects how well the Education Office manages responsiveness, reliability, and professionalism in service delivery. These elements are crucial given that tasks related to Dapodik often involve time-sensitive processes that impact school operations, funding, and reporting obligations (Oktarini & Asmarajaya, 2024).

Empirical data from the Bontang Regional Government shows a dynamic trend in user satisfaction levels with Dapodik administrative services over the past few years. The Public Satisfaction Index (IKM) related to Dapodik service witnessed an increase from 76.31 in 2020 to 91.27 in 2023, followed by a decline to 86.41 in 2024. These ups and downs reflect that although there have been positive steps towards improvement in service quality in the past, certain problems remain or recur, necessitating the need to draw the attention of policy makers again. The informal interviews conducted with some school administrators about the problem identified a problem area related to the response time of the Dapodik employees to technical issues. Administrators also emphasized the need for more efficient communication channels, both online and offline, to ensure timely assistance (Gunawong & Leerasiri, 2022). These findings highlight the need for a systematic evaluation of service satisfaction, particularly with regard to the responsiveness dimension, which has been identified as a significant determinant in many service quality models.

In theory, this research regarding the public's satisfaction with the Dapodik administrative services is an addition to the general conversation on public administration and service management (Ngey, 2024; Sopiah & Wardani, 2025). The public administration includes all activities carried out by the government in order to administer public policy to serve the people's needs. The aims of public administration include efficiency, effectiveness, and accountability along with equality and inclusion (Saner et al., 2020; Tarigan et al., 2023). Therefore, the assessment of the service quality provided by Dapodik can be considered the real manifestation of these theoretical ideas. This evaluation examines how administrative structure, human resource capacity, and digital innovation collectively shape citizens' perceptions of government performance.

This study is relevant to other objectives such as those of the Sustainable Development Goals (SDGs), particularly SDG 4 and SDG 16. SDG 4 speaks of the need for equitable and quality education, which requires having robust and dependable data systems for planning and monitoring (Adipat & Chotikapanich, 2022; Gunawan, 2025; Rad et al., 2022). On the other hand, SDG 16 calls for effective and accountable institutions, which are directly represented in public services provision. This study, through an examination of the satisfaction of the public with the administrative services of Dapodik, places itself at the crossroads between governance and institutional effectiveness.

Measuring satisfaction with public services has been formalized through Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 14 Tahun 2017 tentang Pedoman Penyusunan Survei Kepuasan Masyarakat Unit Penyelenggara Pelayanan Publik [Regulation of the Minister of Administrative and Bureaucratic Reform of the Republic of Indonesia No. 14 of 2017 on Guidelines for the Preparation of Public Satisfaction Surveys at

Public Service Provider Units], which outlines the Public Satisfaction Survey as a standardized framework. The regulation identifies nine key indicators for assessing public service performance: requirements; systems, mechanisms, and procedures; completion time; costs and tariffs; product specifications; staff competence; staff behavior; complaint handling; and facilities and infrastructure. This study adopts this framework to ensure comparability and compliance with national standards, while contextualizing it within the digital service domain represented by Dapodik. The use of these indicators allows for a structured analysis of the technical and behavioral aspects of service delivery, bridging the gap between administrative processes and user experience (Barbazza et al., 2021; Sala et al., 2019; Sierra-Pérez et al., 2021).

The study examining the service quality of Dapodik software based on the SERVQUAL model (Parasuraman et al., 1988) indicated that empathy and responsiveness are the most deficient dimensions (Dzakwan & Ubit, 2025; Jazari et al., 2023). Furthermore, the officer reliability is reported to be an essential determinant of user satisfaction (Desmal et al., 2022; Kalankesh et al., 2020). Both of the findings correspond to the results of research conducted within the realm of public services, and they suggest that the level of user satisfaction is highly dependent on the quality of human interaction rather than on system performance. In the case of the city of Bontang, it means that along with the provision of accurate information, the education office should take into account the responsiveness and empathy of the staff.

The concept of public service highlights the importance of making satisfaction measurement not an administrative ritual but rather a strategy of obtaining feedback. Conducting regular surveys and evaluation will allow public institutions to pinpoint areas where there is room for improvement in service provision. For instance, a reduction in the level of satisfaction reported in Bontang in 2024 can be a signal about the improper use of resources, work overload, and poor communication infrastructure. All these factors need to be taken into account in order to improve the quality of service provided (Alam et al., 2024).

Another important theoretical perspective relevant to this study stems from the policy implementation model proposed by George C. Edwards III (1980) and William N. Dunn (2018), who identified four key variables influencing policy implementation—communication, resources, disposition, and bureaucratic structure—each of which directly applies to the administrative context of Dapodik services. For example, clear communication will affect the manner in which policies concerning information management will be relayed from the national level to the regional level, while resource availability will determine how regional offices respond to user requests (Hassani & MacFeely, 2023; Rijal, 2024; Sultana, 2022). Bureaucratic structure influences the flexibility and efficiency of service procedures and staff attitudes (dispositions) shape user perceptions of responsiveness. Dunn's evaluation model complements this by emphasizing the cyclical process of problem identification, forecasting, recommendations, monitoring, and evaluation—an approach particularly suited to assessing fluctuating satisfaction trends and proposing continuous improvements.

Although there is an extensive array of literature in relation to digital governance and e-governance, the bulk of the studies done in the past have tended to concentrate more on the implementation of technology, the effectiveness of the technology used, and the level of user satisfaction, without paying much attention to the governance process that surrounds the implementation of the digital services. This indicates a theoretical gap in understanding digital governance not merely as a technological transformation, but as a complex process of policy implementation and administrative behavior.

Empirically, studies examining digital public service innovation in Indonesia have largely concentrated on large-scale systems or national platforms, leaving limited insight into localized applications such as the Sistem Pelayanan Rakyat Sidoarjo [Sidoarjo People's Service System] (SIPRAJA) in Sidoarjo Regency. As a result, there is a lack of contextualized evidence on how digital service innovations operate within specific administrative and social environments, including the challenges faced by local implementers and service users.

To address these gaps, this study adopts a digital governance perspective combined with the theory of policy implementation, particularly drawing on the concept of street-level bureaucracy to analyze how front-line actors interpret, adapt, and execute digital service policies in practice. By doing so, this research seeks to provide a more nuanced understanding of how digital innovation in public services is shaped by both technological systems and human agency at the local level, thereby offering both theoretical and empirical contributions to the study of public administration.

## 2. Methods

This study employs a survey-based evaluative approach to assess the quality of public services through the Dapodik system. The evaluation process was conducted in several stages, including the design of research instruments based on service quality indicators, data collection through structured questionnaires, data validation, and quantitative analysis to measure service performance. The population of this study focuses on Dapodik operators, as they serve as key administrative actors who directly manage, input, and verify educational data within the system, thereby possessing both technical knowledge and practical experience in service implementation. Respondents were drawn from this population using a proportional quota sampling method (Sedgwick, 2012), yielding a final sample of 152 school operators across various educational levels. This selection is based on the assumption that operators function as intermediaries between the system and end users, making them critical informants for evaluating system performance and service delivery processes. However, this study also acknowledges that the public, particularly students and parents as service recipients, hold an important position in assessing perceived service quality. Therefore, the evaluation of service quality is interpreted not only from the administrative perspective of operators but also in relation to its impact on user experience, accessibility, and responsiveness of public services facilitated through the Dapodik system.

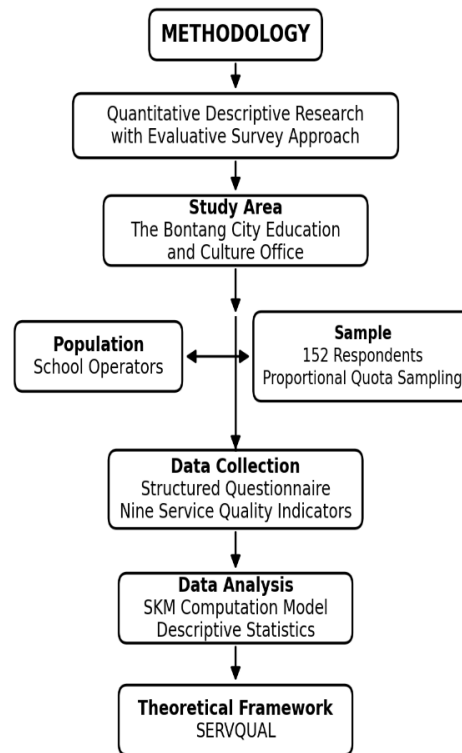


**Figure 1.** Research Methodology Concept Map

Source: Processed by authors. (2025)

### 3. Results and Discussion

The findings of this study reveal the overall level of public satisfaction with Dapodik administrative services at the Bontang City Education and Culture Office as a reflection of the institution's performance in delivering efficient, responsive, and transparent public services in the education sector. The quantitative analysis based on the Public Satisfaction Survey (SKM) showed that the average satisfaction index reached the "Good" category, with most respondents expressing positive perceptions of service accessibility, staff professionalism, and administrative accuracy. The consistency of service delivery across different education levels indicates that the Office has implemented a relatively standardized system that aligns with national service guidelines. However, the findings also show a slight variation in satisfaction levels among respondents, suggesting that while the overall service quality is perceived as satisfactory, there remain specific dimensions of service that need to be strengthened to maintain long-term consistency and reliability. This pattern aligns with the historical data of the Public Satisfaction Index in Bontang, which demonstrated fluctuations between 2020 and 2024, highlighting the dynamic nature of user expectations in digital-based administrative services.

When analyzing service performance according to its dimensions, the evaluation of the nine SKM indicators and the five SERVQUAL dimensions (tangibles, reliability, responsiveness, assurance, and empathy) provides more insight into the advantages and disadvantages of services. The high scoring dimensions were the dimensions associated with tangible aspects and employee competence in which the adequacy of the infrastructure, information, and technological competence of Dapodik staff were recognized. The structure and digitalization have helped facilitate the process, especially when dealing with school data validation and management. However, the scores for the dimensions of responsiveness and complaint resolution are relatively low, indicating that the users demand prompt responses and support

in real-time, especially when facing problems with the application or system. This indicates that the service requires improvement in terms of agility facilitated through digital platforms for communication, training courses concerning interpersonal communication skills, and using feedback management system to increase service satisfaction (Rahman & Jyoti, 2022).

Further analysis identified several factors influencing user satisfaction with Dapodik administrative services. The prominent ones were the responsiveness of staff members, clear communication, and the fairness and transparency of the process of service provision. Respondents pointed out that prompt help and empathic interaction with staff members are significant for developing overall satisfaction, regardless of any problems with the technology. At the same time, systemic barriers such as heavy workload, limited personnel, and infrastructural problems are the reasons for delays which have an adverse impact on satisfaction levels. The information gathered through interviews shows that operators appreciate the commitment of Dapodik staff, yet expect adaptation and technological support for problem solving from the institution. This finding reinforces the theoretical proposition that satisfaction in public services is not only determined by procedural efficiency but also by the relational and emotional quality of service encounters (del Rio-Lanza et al., 2009; Rhee & Rha, 2009). The synergy between technical performance and human responsiveness therefore becomes a key determinant of public trust and satisfaction.

Considering the satisfaction score distribution and analyzing the affecting factors, the research has revealed several key issues to be taken into account by the Office in order to enhance their service. For instance, making employees more responsive through regular training, expanding access to digital communication tools, and implementing automated feedback systems can contribute significantly to better service quality. In addition, the use of SKM tools will help the Office monitor changes in satisfaction trends and make necessary adjustments to their policies based on evidence. The willingness of the institution to maintain high service standards along with innovations will be crucial for the sustainable improvement of service quality. In this context, the measurement of public satisfaction becomes an important instrument of public governance which helps to link the needs of the public with the accountability of the bureaucracy. Thus, having addressed all of these challenges and consolidated its service culture, the Bontang City Education and Culture Office will become a reliable and efficient provider of educational administrative services.

#### Overall Level of Public Satisfaction with Dapodik Administrative Services

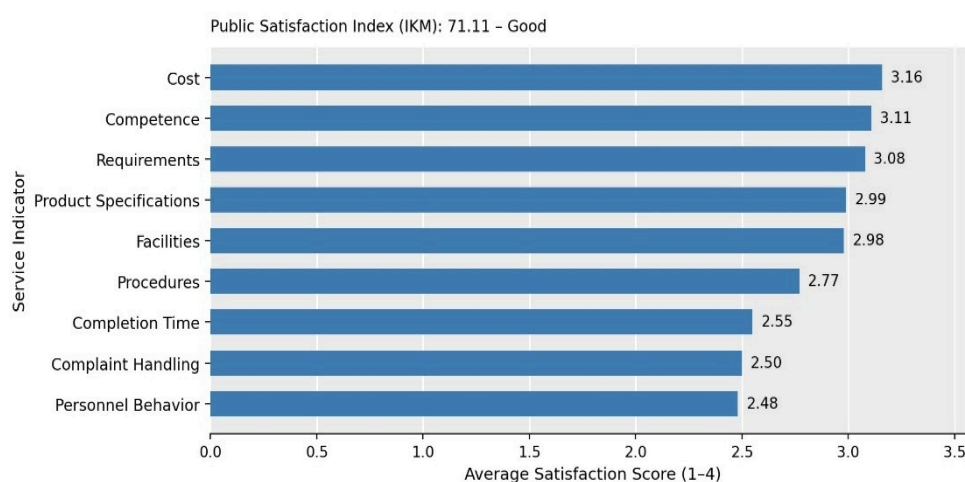


**Figure 2.** Overall Level of Public Satisfaction with Dapodik Administrative Services

Source: Primary data, processed by the authors. (2026)

Figure 2 shows the results of an analysis of the overall level of public satisfaction with Dapodik administrative services at the Bontang City Education and Culture Office. The overall perception of service performance falls in the "Good" category, with a Public Satisfaction Index (IKM) score of 71.11. Although the index has not yet reached the "Very Good" category, the data indicate that the agency is able to provide stable service quality, with several issues remaining with respect to responsiveness, efficiency, and consistency. Based on the average scores of the nine service indicators, there is a mixed perception of the users about the service provided, meaning that some features of the service work well, while others need further improvement.

Of all nine indicators considered, the greatest degree of satisfaction is in the "Cost" indicator with an average value of 3.16. This means that users usually view the cost structure of the administrative services as being understandable, affordable and in compliance with regulatory provisions. Such results indicate that Bontang City Education and Culture Office has effectively maintained the transparency and justice in cost management in accordance with national standards on public service accountability. The "Competence" and "Requirements" indicators have also received relatively high average values of 3.11 and 3.08 respectively (Ovtšarenko & Safulina, 2025; Song et al., 2025). These results reflect respondents' recognition of staff competence and the clarity of administrative requirements involved in Dapodik-related processes. It can be concluded that the agency has successfully established a foundation of procedural order and technical expertise, which are essential elements for ensuring data reliability and administrative compliance in the education management system.

On the other hand, some indicators scored significantly lower satisfaction ratings, which reflect some weaknesses of the administration in delivering their services to users. "Personnel Behavior," "Complaint Handling," and "Completion Time" ranked lowest with satisfaction ratings of 2.48, 2.50, and 2.55, respectively. This means that although technicalities and procedures had already been established for the service, there is a need to address some more concerns in terms of interactivity and responsiveness of the administration towards their users. It is expected that staff behavior perceived by the respondents reflects the quality of interaction, empathy, and willingness of the personnel to assist them beyond the set procedures. In the same way, low satisfaction ratings in the handling of complaints suggest inadequate means of responsiveness to the complaints and feedback provided by the users. On the other hand, problems with timeliness could reflect inefficiencies in processing requests or validating the system in Dapodik (Hashmi et al., 2023).

This study is also reflective of good performance on parameters like "Procedures" (2.77), "Facilities" (2.98), and "Product Specifications" (2.99). Even though the scores on these parameters are closer to the mean score, it can be seen that the institutional framework for implementing Dapodik is performing satisfactorily though still needs improvement. "Procedure" can be taken to mean that standardization has been achieved, but it still needs streamlining and flexibility depending on the capacity of the users in various institutions. Facilities is the level of adequacy of both physical and digital infrastructures used. The score obtained is relatively good, though implying that there could be improvements made in aspects like accessibility, technical help, and system reliability. Product specification reflects the degree to which users accept and understand outputs or documents from the Dapodik process.

In terms of governance, this research shows the significance of integrating technological, procedural, and human elements into the coherent service system (Ostrom et al., 2021). First and foremost, the task of the Office of Education and

Culture of Bontang City is to build an adaptive institutional culture where the attention to the users is as significant as administrative compliance. When trying to enhance public satisfaction, it would be more beneficial not only to try to streamline work processes and automate data processing but to pay more attention to the enhancement of the quality of interaction between the users and the office workers. Furthermore, integrating structured feedback into the Dapodik system will enable the agency to capture user input directly and address service gaps more proactively, ultimately improving both perceived and actual service performance (Mulyono et al., 2024).

A "Good" satisfaction category with an IKM score of 71.11 reflects solid overall performance, though it also signals room for improvement before the service can be considered "Very Good." Administrative services of Dapodik in Bontang are exemplary in terms of cost, competence, and procedure clarity. However, further improvement is required concerning responsiveness, complaint handling, and the quality of staff behavior. These results give a good basis for further development of strategies to focus on key aspects that influence user experience and trust. Improving these factors with the help of cross-sector collaboration, better communication processes, and accountability measures will be an important step towards advancing the level of satisfaction from "Good" to "Very Good." Therefore, the presented data gives us both an analysis and recommendations on how to improve institutions further.

### 3.1. Dimension-Based Analysis of Service Quality Indicators

The dimension-based analysis of service quality indicators provides a deeper understanding of how users perceive each aspect of the Dapodik administrative services at the Bontang City Education and Culture Office, emphasizing both the strengths and the weaknesses across multiple dimensions of service performance. This analysis integrates the nine Public Satisfaction Survey (SKM) indicators with the five dimensions of the SERVQUAL model—tangibles, reliability, responsiveness, assurance, and empathy—to form a comprehensive framework for interpreting satisfaction levels. The “tangibles” dimension, which encompasses service facilities, infrastructure, and accessibility, received relatively high scores, suggesting that respondents generally find the physical and digital environments of Dapodik administration adequate for their needs. This includes the availability of equipment, the clarity of communication tools, and the overall functionality of administrative interfaces. The findings also indicate that the office’s investment in digital infrastructure and the structured implementation of Dapodik procedures contribute to user perceptions of professionalism and organizational readiness (Fajri et al., 2025). However, the analysis also reveals that while physical and procedural aspects are satisfactory, they do not entirely compensate for the human and emotional dimensions of service delivery, which are equally significant in shaping user satisfaction.

In terms of reliability and assurance, the study found that users generally trust the technical capability of Dapodik staff and the consistency of administrative processes. The “competence” and “requirements” indicators, both of which fall under these dimensions, were among the highest-rated aspects, reflecting the institution’s ability to provide accurate, timely, and technically sound services. Respondents appreciated that the service procedures were well-structured and that staff members demonstrated adequate knowledge of data management systems and regulatory compliance. Reliability is also a source of trust for those who run schools about the accuracy of the administration’s data processing and the predictability and transparency of organizational processes (Funk et al., 2018). The dimension of assurance speaks to the trust that users have in the legitimacy and professionalism

of the organization, strengthened by proper communication and procedure. However, it should be noted that the analysis reveals how the combination of reliability and responsiveness as well as empathy is needed for user satisfaction. Technical expertise is not enough for a good user experience if there is no responsiveness or empathy.

The lowest-performing dimensions, responsiveness and empathy, reveal critical areas for improvement in Dapodik service delivery. Responsiveness, which refers to the willingness and promptness of staff in assisting users, was found to be inconsistent, with users reporting delays in feedback and limited follow-up on technical issues. Likewise, in the empathy dimension, which measures courtesy, empathy, and personalized service, the score was the lowest through measurements such as “behavior of personnel” and “complaint handling.” This implies a need to balance procedure with quality, as users demand humanization of the processes in the services of public institutions. It should be emphasized that poor responsiveness and empathy are usually linked to structural barriers like unbalanced workloads, lack of training on interpersonal communication skills, and non-integrated feedback process in the Dapodik system. In order to overcome these barriers, it is necessary to make a change in the culture of the institution where it will be seen not as adherence to bureaucratic procedures but as collaborative service provision. Improvement in responsiveness and empathy will not only lead to better satisfaction scores but also will create trust among users and enhance reputation of the service.

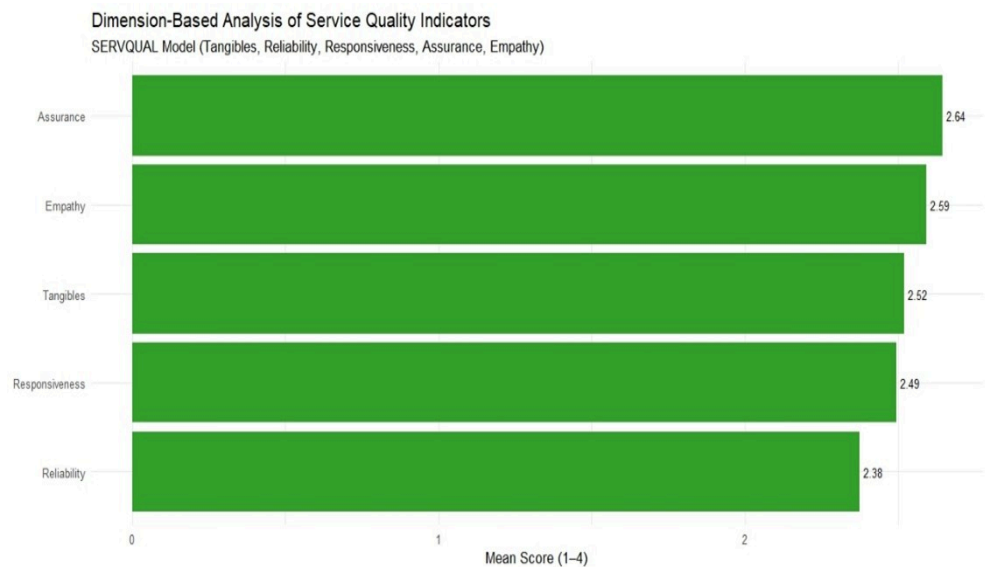


**Figure 3.** Overall Level of Public Satisfaction with Dapodik Administrative Services

Source: Primary data, processed by the authors. (2026)

Figure 3, a dimension-based analysis of service quality indicators in Dapodik administrative services at the Bontang City Education and Culture Office, provides a clear picture of how respondents perceived each SERVQUAL dimension. The graph highlights the five major aspects of service quality, namely assurance, empathy, tangibles, responsiveness, and reliability. The graph shows that there are moderate levels of user satisfaction in all the five aspects, where the highest mean rating is recorded for assurance, which is 2.64, while the lowest mean rating is recorded for reliability, which is 2.38. This implies that although the users are satisfied with staff professionalism and credibility, there are major issues with service reliability. These differences across dimensions reflect the multifaceted nature of service quality and underscore the need to address both the human and procedural components of public service management (Engkus, 2023).

Assurance, the dimension with the highest score, reveals that users have confidence in the proficiency, courtesy, and credibility of Dapodik employees. The high scores for the assurance dimension show that the employees are knowledgeable and skilled in performing administrative duties and the users have confidence in their capabilities to handle data and deal with problems using proper protocols. In this case, assurance reflects the level of professionalism in the organization, which is key to ensuring trust of the users in the data management system (Bodó & Janssen, 2022). Increased satisfaction levels regarding this dimension may be explained by the structured nature of the operations of Dapodik, where standardized procedures make the process clear and consistent. Even though such positive perceptions exist, there is a need for training and performance appraisal of the Dapodik employees for maintenance and improvement of their credibility and reliability.

The Empathy dimension, which ranks second in the overall rating with an average score of 2.59, concerns the perception of the degree of understanding, friendliness, and personalized care offered by the staff providing services. These findings suggest that even though the attitude demonstrated by the staff is fairly positive, there is still much space left for improving their relationship with the users on a more interpersonal basis. It seems reasonable to assume that even though the staff may be fairly friendly and polite, they might still miss a degree of involvement and proactiveness required to make the user feel cared about and treated as a partner. Empathy is extremely important for the development of the public service institutions, since it demonstrates the willingness of the institution to serve its clients beyond its procedural functions (Bisschoff & Massyn, 2025).

The Tangibles dimension, with a mean score of 2.52, reflects user perceptions of the physical and technological aspects of the Dapodik administrative environment, including facilities, tools, and accessibility of digital platforms. The score suggests that while the infrastructure supporting Dapodik operations is functional, it may not yet fully meet users' expectations in terms of convenience, efficiency, or visual clarity. It can refer to the lack of infrastructure in the offices, network issues, or problems related to using the Dapodik portal itself (Fannisha et al., 2023). When it comes to the delivery of public services, tangible resources are vital since they are responsible for the first impression and reflect the image of the organization's capabilities. Thus, despite the fact that the physical environment is not the most important aspect of user satisfaction, its development can greatly improve the service provided.

Responsiveness, having an average value of 2.49, is one more factor that deserves additional attention. Responsiveness is a factor assessing the speed with which service staff responds to users' queries and problems. The lower score implies that there are delays in getting answers from Dapodik staff or in general the lack of adequate responsiveness of the service. As a result, responsiveness becomes an indicator of organizational agility and communication system; therefore, the delays might be a result of bureaucratic obstacles, insufficient number of staff, or even communication channel. In order to increase responsiveness, better management of work process should be introduced, including online ticket system and notification about the progress of the request (Ahmed et al., 2023). Higher level of responsiveness not only results in increasing the levels of satisfaction, but also increases the trust level of users.

The lowest mean score, recorded in the Reliability dimension at 2.38, signals a critical gap in the consistency and dependability of service performance. Reliability is about the ability of the organization to deliver its promised services effectively and accurately. This rating is very low since there is a possibility that the users may have encountered some inconsistencies in the results expected and delivered, such as failures, lateness, or inappropriate use of the process. Given the importance of the

data accuracy and promptness in Dapodik, poor reliability can greatly diminish the credibility of the whole administrative process. This score shows that it is necessary to enhance the process of supervision, evaluate the time taken to deliver the services, and establish quality control procedures to reduce errors.

When analyzed collectively, these five dimensions provide a balanced view of both the strengths and challenges of the Dapodik administrative services in Bontang City. The similarity of mean values from 2.38 to 2.64 points suggests that there is no particular dimension of high value nor low value, which means that all dimensions are quite alike in terms of their perception. At the same time, the findings imply that the service quality of the institution is on the edge of the medium level of satisfaction since people appreciate the existence of the structure but not its excellence yet. This suggests that the institution faces one of the intermediate stages of the development of public digital services where there is a structure, but there is no adaptability and relation yet.

To conclude, according to the results of the dimension-based analysis, assurance and empathy are viewed positively by users of Dapodik administrative services, whereas responsiveness and reliability are in need of significant improvements. This evidence stresses the fact that public service quality is characterized by a duality; it should be not only technically efficient but also emotionally engaging. Improvement of responsiveness will make it possible for the institution to foster greater levels of trust and decrease users' frustration, whereas improvement of reliability will provide the long-term assurance regarding the correctness and preciseness of data. Involvement of feedback-based performance management, continuous capacity building, and digital innovations may help improve user satisfaction in all dimensions. Thus, this illustration shows that service excellence within the context of Dapodik administration is possible not only because of the conformity to bureaucratic requirements but also due to the combination of procedure, technology, and emotions.

### 3.2. Factors Influencing User Satisfaction and Service Improvement Priorities

Factors contributing to the satisfaction of the user of Dapodik administrative service at the office of Education and Culture, Bontang city, include the correlation between technical, organizational competencies and the quality of human interactions that can influence user experiences. Among the main factors that define the level of satisfaction is the responsiveness of the service personnel to the users' needs and to the problems of the users concerning Dapodik data processing. Users estimate the service quality according to the effectiveness and accuracy of the process of solving the users' problems, especially taking into account the fact that the Dapodik data processing is a technical one and requires both rapidness and accuracy. Late responding to the users' demands and poor communication in the process of solving the problems cause dissatisfaction and lack of trust towards the service. Nevertheless, the initiative to communicate and guide the Dapodik users enhance their trust and satisfaction. Hence, responsiveness is not only a managerial issue but also the basis of credibility of the institution because it shows the ability of the institution to adapt to the demands of its stakeholders (Khalil, 2021).

One more important aspect of the factors affecting user satisfaction is the perceived level of competence and empathy of the people providing services that affect the professional attitude to the institution as a whole. The professional competence of the Dapodik staff guarantees smooth functioning of the processes of administration, precise data input and proper regulation. However, mere competence is not enough for satisfaction as it should be complemented with empathy, communicational ability and readiness to help. Users from the education

sector, such as school administrators, often need assistance and psychological support in the cases of errors of the system and procedural changes. It is important that the staff act patiently, politely and attentive towards the user so that he/she felt supported and acknowledged despite any technical issues. Such a combination of skills represents the essence of public service ethics and conforms to the concept of human-centered governance, which states that efficiency and compassion should go hand in hand in order for government to be effective.

These considerations give rise to the following service improvement objectives which need to be considered in the process of improving user satisfaction from using Dapodik administration services. Improvements in staff responsiveness and empathy need to be encouraged through regular training in communication skills, problem solving, and online service management. Furthermore, the creation of feedback and complaints mechanisms will provide an opportunity for users to report their problems to the institution and get quick responses. The enhancement in reliability of the services can be brought about through the reinforcement of processes, stability of the system, and technical support. This will not only bring about operational efficiency but will also help create a culture of accountability and transparency where the users will find that the organization is not only efficient but also caring. Thus, improvement of Dapodik services must be seen as a continuous process.

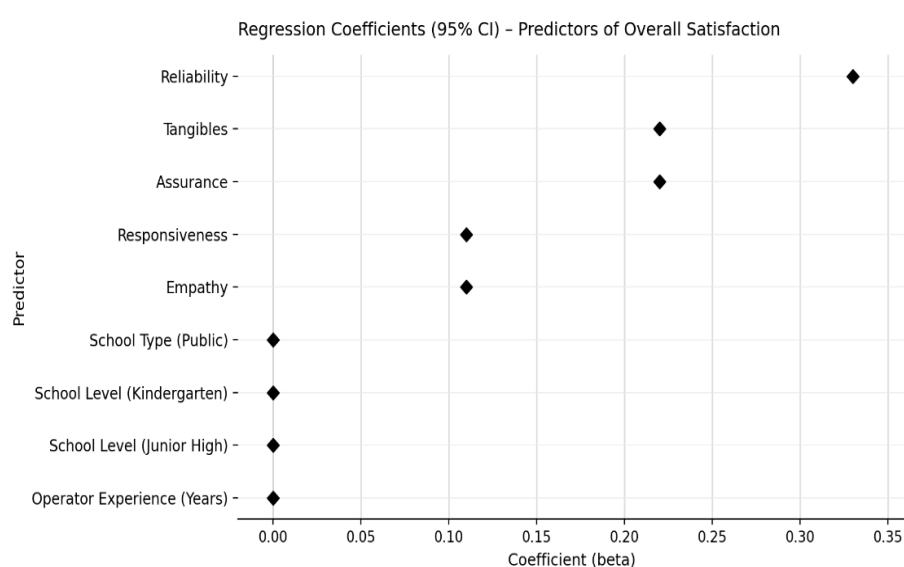


**Figure 4.** Regression Coefficients – Predictors of Overall Satisfaction

Source: Primary data, processed by the authors. (2026)

Figure 4 shows the regression coefficients presented in the figure, illustrating the relative influence of various predictors on overall user satisfaction with Dapodik administrative services at the Bontang City Education and Culture Office. Each point represents a standardized regression coefficient (beta), while the horizontal line extending from each point indicates the 95% confidence interval for the estimate. The further away that the data point is located on the x-axis, the more positive its estimated effect on user satisfaction is expected to be. On the other hand, a low number close to zero shows a small and insignificant effect. Such visualizing allows differentiating dimensions and context variables from the SERVQUAL model and demographics, respectively, that have a stronger/lesser effect on service perception.

As evident from the above graph, the highest positive impact of any dimension on the overall satisfaction of users is the Reliability dimension, which has an approximately 0.3 coefficient. The importance of dependability, reliability, and consistency cannot be overlooked in terms of the performance of Dapodik

administrative services. The users who experience reliability in terms of regularity in the schedule of data processing, no errors in the process of data processing, and consistency of the procedure tend to express more satisfaction. It is important for institutions to ensure reliability of their actions in order to fulfill all the expectations of the users. Thus, it is essential to ensure timeliness, consistency, and reliability of Dapodik services ([Jumalia Mannayong, 2024](#)).

The next most influential dimension is Tangibles, which also shows a positive and relatively strong coefficient. Tangibles include both physical and electronic elements of the service delivery process, including the ease with which one can access the Dapodik system, the ease with which one can use the interface, and the sufficiency of the support infrastructure. The higher the score in this dimension, the higher the level of perceived sufficiency and ease-of-use of the facilities and resources involved. The existence of such an association implies that, where there is a perception of intuitiveness, stability, and sufficient hardware and human support for the system, satisfaction automatically increases. This follows from the public service innovation theory, which argues that modernization of infrastructure makes the delivery of services more efficient.

The Assurance component had a moderate influence on overall satisfaction in terms of assurance from the expertise and professionalism of the Dapodik staff. The assurance component refers to the amount of knowledge, courtesy, and trustworthiness shown by the providers and their capacity to instill assurance among users ([Setiono & Hidayat, 2022](#)). The Assurance coefficient shows that the users not only seek technical proficiency from the service providers but also need predictability and credibility in terms of interactions with the staff. Whenever the service staff possesses expertise of procedures, is communicative, and provides accurate information, there is assuredness among the users that the data will be handled in the appropriate manner. Thus, the assurance from technical skills as well as personal skills of the service staff contributes to satisfaction. Hence, the staff competency should be maintained through training programs.

After assurance, the responsiveness and empathy dimensions also demonstrated positive coefficients, albeit smaller in magnitude. Responsiveness deals with how quickly and efficiently the staff responds to user needs, while empathy is concerned with the degree of understanding and personal attention given to the users. Together, these two aspects denote the human element of service provision, which can be seen as an attribute complementing procedure efficiency. Low coefficients indicate that although both aspects of service provision play an important role in user satisfaction, their impact is not substantial at the moment because of various structural factors like small staffing numbers, high workload, or lack of communication means. Nonetheless, even minor changes in these two aspects might bring considerable gains in user satisfaction.

Ironically, the demographic or context variables of School Type (Public & Private), School Level (Kindergarten, Elementary & Junior High), and Operator Experience (in years) have very low to nearly zero coefficient values. This implies that there are no significant differences in user satisfaction toward Dapodik services regardless of the type of schools involved and personal experience of the operator using the software. Practically, this suggests that the Dapodik service delivery system is perceived as equally accessible and functional by diverse user groups. The neutrality of these variables can be interpreted positively, as it implies fairness and equality in the provision of services, meaning that the office has successfully implemented standard procedures that do not disproportionately benefit or disadvantage certain categories of users.

The narrow confidence intervals around the SERVQUAL dimension estimates indicate a high degree of precision and consistency in the regression results. The

stability of these statistics adds weight to the hypothesis that the key determinants of user satisfaction are dimensions of service quality like reliability, tangibles, and assurance, not personal and organizational variables. On the governance level, it means that the way to increase the level of user satisfaction is to work on basic parameters of service delivery, not only on context. Moreover, such strategic actions can be effective and equal for all users of the organization.

Conclusively, the graph on regression coefficients offers proof that the satisfaction of users with administrative services of Dapodik organization depends mainly on the ability of the organization to provide reliable, well-supported, and credible administration performance. The reliability is the most critical aspect in this case, and tangibles and assurance come in second place in terms of significance. While responsiveness and empathy make positive contributions, they are currently underperforming and should be prioritized for development through improved communication systems and user engagement practices. The minimal effect of demographic factors suggests that service systems operate uniformly across contexts, reflecting institutional equity. Together, these insights guide the formulation of improvement priorities—focusing on enhancing reliability, infrastructure, and professional assurance as foundations for advancing user satisfaction and institutional excellence in public service management.

An analysis of public satisfaction of Dapodik administration services offered by the Education and Culture Office of Bontang City indicates that the performance of the service is influenced by the factors of reliability, competence, and responsiveness. The findings of the overall satisfaction of service indicate that the public has a perception of service quality as being quite good, yet some dimensions show a higher performance than others. The respondents are very satisfied with the aspects of service assurance and competence. These dimensions show the professionalism of Dapodik staff and the conformity to the standards. However, those of responsiveness, complaints, and efficiency fall behind. This means that although the foundation of the system is quite strong, the communication process between the organization and its users is not fully developed yet. This problem is common to public sector organizations, as their technical system becomes quite advanced, yet hindered by lack of communications and rigid procedures. Therefore, an evaluation of the overall satisfaction not only provides an assessment of the public perception, but also allows for diagnosing weak points of the organizational structure.

The dimension-based analysis of service quality indicators helps to identify the particular aspects that impact the perception of Dapodik service environment by users. According to the assessment based on SERVQUAL, assurance and empathy are the dimensions which have the highest level of importance and significantly contribute to the level of user satisfaction, which shows that the staff is crucial for creating trust towards the institution. Tangibles, which stand for the hardware and software required for service delivery, are also significant for user satisfaction, suggesting that having available and reliable technological means can contribute to the increase in satisfaction. On the other hand, such dimensions as responsiveness and reliability have relatively low mean scores and show that there is some kind of bottleneck in the process of information communication and service output. Thus, these differences indicate that service quality cannot be created only due to administrative actions but should include relations and processes, as well. To improve the mentioned dimensions, it is necessary to use a complex approach based on technological innovations, process optimization, and human resources development (Ostrom et al., 2015).

The analysis of the factors affecting the level of user satisfaction through regression offers additional insight into the degree of significance of each dimension

in terms of service quality. In this regard, the research results indicate that the dimensions of reliability, tangibles, and assurance have the highest positive impact on the level of satisfaction, indicating the importance of reliability in service provision, appropriate infrastructure, and performance of the staff to satisfy users. Surprisingly, demographic factors and institution-specific features like school type, level, and years of experience of the operator do not have any significant effect on the level of satisfaction from Dapodik services, which shows that the services are equally available for all types of users. In this case, the uniformity and fairness of the services in terms of their availability is a sign of a high-quality public administration system. Nevertheless, the low significance of responsiveness and empathy implies that the dynamic nature of interactions with the users should be taken into account.

#### 4. Conclusion

The results of this study indicate that out of all factors identified, the technical proficiency and reliability become the most influential ones for determining the level of public satisfaction from the provided services via Dapodik. It becomes clear that the effectiveness of managing the system by its operators as well as its reliability and accuracy play an important role in forming users' perceptions regarding the service quality. Although there are other aspects like responsiveness and coordination that affect the system performance, the impact of these factors is less significant in comparison. This means that in order to improve the level of public satisfaction, it is important to pay attention to increasing human resources proficiency and investing in technical education and development of the system infrastructure.

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