Journal of Educational Sciences
Journal homepage: https://jes.ejournal.unri.ac.id/index.php/JES

P-ISSN 2581-1657
E-ISSN 2581-2203

Implementation of the Primasi Application-Based Management Information System to Support the Quality of Educational Services at the Prima Swarga Bara Education Foundation, East Kutai Regency

Faizah Nurbani Wisnu Putri*, Mada Sutapa
Magister Pendidikan, Program Studi Manajemen Pendidikan, Fakultas Ilmu Pendidikan, Universitas Negeri Yogyakarta, 55281, Indonesia

ARTICLE INFO

Article history:

Received: 01 April 2026
Accepted: 28 April 2026
Available Online: 05 May 2026

Keywords:

Management Information Systems,
PRIMASI,
Quality of Educational Services,
Educational Administration

* *Corresponding author:*

E-mail: faizahnurbani.2023@student.uny.ac.id
madasutapa@uny.ac.id

Article Doi:

https://doi.org/10.31258/jes.10.5.p.443-461

A B S T R A C T

This study aims to analyze the implementation of the PRIMASI application-based management information system in supporting the quality of educational services within the Prima Swarga Bara Education Foundation and to identify the supporting factors and constraints in its implementation. The study employs a qualitative descriptive approach and was conducted at the foundation in East Kutai Regency, covering educational levels from kindergarten to junior high school as well as the foundation office. Research subjects included foundation administrators, school principals, teachers, and educational staff. Data were collected through in-depth interviews, observations, and documentation, then analyzed using data reduction, data presentation, and conclusion drawing with triangulation to ensure validity. The findings reveal that the PRIMASI application has been implemented as the main system for managing educational administration, contributing to improved efficiency, data accuracy, integration, and transparency of services. Supporting factors include institutional policies, management commitment, IT support, training, and device availability. Meanwhile, constraints involve network issues, system stability, user adaptation, and discipline in data entry. The study recommends strengthening infrastructure and enhancing user support for sustainability.

1. Introduction

The era of the Fourth Industrial Revolution is characterized by the integration of digital technology, automation, and connectivity (cyber-physical systems), which drives smarter, more efficient, and real-time data-driven work processes, thereby supporting rapid and accurate decision-making (Vaidya et al., 2018). Systematically processed information also improves the quality of information

delivery to users (Sallaby, 2020). In the field of education, the use of digital information systems can improve administrative and operational efficiency, as well as support the learning process (Wijaya et al., 2023). Management Information Systems (MIS) play a role in integrating academic and administrative data to improve the effectiveness of services and the competitiveness of educational institutions (Loryana, 2021). Web-based MIS is a relevant solution because it enables flexible access to information, process automation, and rapid communication (Bahar, 2021), and has been proven to improve the efficiency and transparency of educational services (Prasetiyo et al., 2024; Farida et al., 2021).

The implementation of the SIM has significantly contributed to improving the quality of educational services, although it still faces challenges such as limited digital literacy and adherence to usage guidelines (Mulyono, 2023). At the Prima Swarga Bara Education Foundation (YPPSB), the development of the PRIMASI application as an integrated MIS aims to improve the efficiency, accuracy, and transparency of administration. Although it has had a positive impact, its implementation still faces technical challenges and user adaptation issues, necessitating optimization to fully support the improvement of educational service quality (Jumriani, 2023). An information system is the integration of technology and human resources used to process data into information to support organizational operations and decision-making (Yaumi, 2021). In an organizational context, a Management Information System (MIS) functions as an integrated system that generates high-quality information to support managerial functions and the effective achievement of objectives (Rahman, 2022).

In the field of education, an MIS is known as the Education Management Information System (SIMDIK), which plays a role in efficiently managing academic and administrative data, improving the accuracy of information, and supporting data-driven decision-making (Rusdiana, 2019). The implementation of SIMDIK has proven capable of improving efficiency, transparency, and the quality of educational services, while also strengthening stakeholder engagement (Faizal et al., 2021; Marlina, 2024; Lubis, 2024). One implementation of SIMDIK is the PRIMASI application, developed by the Prima Swarga Bara Education Foundation as a web-based system for the integrated management of personnel, financial, asset, and service administration. This application supports efficiency, transparency, and real-time data-driven decision-making, although it still faces technical challenges and user adaptation issues (Mulyono, 2023). Thus, PRIMASI reflects the application of SIM at the middle management level, focusing on improving administrative effectiveness and the quality of educational services.

Quality management is the process of effectively and efficiently managing resources to achieve organizational goals through the functions of planning, organizing, executing, and controlling (Mu'in, 2023; Ma'arif, 2016). Quality itself is defined as the level of excellence of a product or service in meeting or exceeding customer needs and expectations (Siregar et al., 2022). In the context of education, educational quality management focuses on systematic efforts to improve the quality of educational services by involving all elements of the organization and being oriented toward the satisfaction of students and stakeholders (Hidayat, 2023).

The implementation of educational quality management is based on the Juran Trilogy, which consists of quality planning, quality control, and continuous quality improvement (Juran, 1998). These principles are reinforced by an approach that emphasizes customer focus, leadership, the involvement of all members, data-driven decision-making, and continuous improvement. In practice, the quality of educational services is determined by the effectiveness of the learning process, the quality of administrative services, and the level of satisfaction among users of educational services (Sallis, 2002).

With technological advancements, digitalization through management information systems has proven capable of enhancing the efficiency, accuracy, and accessibility of educational services, thereby directly impacting service quality improvement (Sanoto et al., 2025). In this context, the implementation of systems such as PRIMASI serves as a strategic tool to support educational quality management through integrated, transparent, and data-driven administration. The success of such a system can be evaluated using the DeLone and McLean model, which encompasses system quality, information quality, service quality, usage, user satisfaction, and net benefits to organizational performance (DeLone, 2003).

Research on the implementation of Management Information Systems (MIS) in education indicates that the use of information technology plays a crucial role in improving service quality, particularly in terms of administration, work efficiency, data accuracy, and data-driven decision-making. A study by Farida et al. (2021) indicates that an integrated MIS can accelerate administrative services and support decision-making, with success influenced by the readiness of human resources and infrastructure. Furthermore, Jumriani (2023) found that the implementation of various MIS applications can improve the efficiency and productivity of educational data management. Ramdani (2020) also revealed that SIM contributes significantly to the quality of educational services by 21.2%, primarily through the quality of the information generated. Additionally, Rahmadi et al. (2021) emphasize that information system integration can improve school management efficiency and facilitate information access for all stakeholders. This study aims to analyze the implementation of the PRIMASI application-based management information system in supporting the improvement of educational service quality within the Prima Swarga Bara Education Foundation (YPPSB). Additionally, this study aims to identify the various factors that serve as enablers and constraints in the implementation of the PRIMASI application at educational institutions under the auspices of YPPSB.

2. Methodology

This study employs a qualitative phenomenological approach, aiming to understand the meaning of users' experiences in implementing the PRIMASI application-based management information system within the Prima Swarga Bara Education Foundation (YPPSB) (Sugiyono, 2023). This approach allows the researcher to deeply explore the informants' perceptions, understanding, and experiences

regarding the effectiveness, efficiency, and challenges of using the system in educational administration.
The research was conducted at YPPSB, East Kutai Regency, East Kalimantan, during the period of July–August 2025, focusing on the kindergarten, elementary, and junior high school levels, as well as foundation management. Data sources consisted of primary data obtained through interviews with key informants (managers, supervisors, school principals, administrative staff, and teachers) selected through purposive sampling, as well as secondary data in the form of institutional documents, activity reports, and archives related to the implementation of PRIMASI.

Data collection techniques included semi-structured interviews, direct observation, and document analysis to obtain comprehensive data. The research instrument was developed based on DeLone (2003) information system success model, which encompasses system quality, information quality, service quality, usage, user satisfaction, and net benefits. Data validity is ensured through tests of credibility, transferability, dependability, and confirmability, using techniques such as source and method triangulation, member checks, and peer discussions (Sugiyono, 2023). Data analysis was conducted through the stages of data collection, data reduction, categorization, and thematic conclusion-drawing to produce a deep understanding of the implementation of PRIMASI and its contribution to the quality of educational services.

3. Result and Discussion

a. Profile of the Prima Swarga Bara Education Foundation (YPPSB)

The Prima Swarga Bara Education Foundation (YPPSB) is an educational institution established by PT Kaltim Prima Coal in 1991 as part of the company's corporate social responsibility in the field of education. The establishment of YPPSB was driven by limited access to education in the Sangatta region during the early operational phase of the company. This aligns with the concept of corporate social responsibility (CSR), which emphasizes a company's contribution to social development, including education. Over time, YPPSB has undergone significant expansion in both the number of educational units and the quality of services provided. Initially covering only kindergarten, elementary, and junior high school levels, YPPSB now manages six educational institutions up to the senior high school level, with the addition of SMA Prima a military-style and bilingual senior high school for the 2023/2024 academic year. This development reflects the growing community need for quality educational services that are adaptable to the changing times.

Organizationally, YPPSB has a systematic structure consisting of advisors, supervisors, board members, and operational staff. This structure reflects the principles of good governance in educational organizations, namely a clear division of responsibilities, transparency, and accountability in the management of the institution (Purnomo, 2013). YPPSB's vision, "The Realization of a Premier

Educational Institution with Outstanding and Character-Driven Graduates," underscores the institution's focus on balancing academic achievement with character development. This aligns with the modern educational paradigm that emphasizes the holistic development of students' competencies, including cognitive, affective, and psychomotor aspects.

b. Scope of Educational Institutions: Preschool through Junior High School

YPPSB manages six educational institutions, comprising a kindergarten, three elementary schools, a junior high school, and a senior high school, all operating under a single integrated management system. This consistency is evident in the implementation of the Merdeka Curriculum, which focuses on student centered learning and the strengthening of the Pancasila learner profile. The implementation of this curriculum demonstrates that YPPSB has adopted a constructivist learning approach, in which students are active participants in the learning process. Additionally, the integration of technology into both learning and administration reflects the digital transformation in education demanded by the era of the Fourth Industrial Revolution (Schwab, 2016).

From a management perspective, each school unit is led by a principal who coordinates with the foundation's management. This coordination model reflects a school-based management approach that remains integrated within the foundation's system, thereby enabling more effective and targeted decision-making. The use of the PRIMASI application-based management information system across all school units is a key factor in creating administrative efficiency. This system supports centralized, real-time, and transparent data management, which are the primary characteristics of modern educational management information systems.

c. Development History of the PRIMASI Application

Development of the PRIMASI application at YPPSB began in 2022 in response to ISO audit findings that identified weaknesses in the manual administrative system. This transition from a manual to a digital system is a strategic step toward improving the efficiency and accuracy of data management (Gagaramusu, 2025). PRIMASI is designed as an integrated management information system encompassing HRMS, Finance, Assets, and Service modules. These four modules address the organization's core needs for managing human resources, finances, infrastructure, and operational services in an integrated manner. The implementation of such an integrated system has proven to improve organizational performance by reducing data redundancy and accelerating decision-making processes (Riansih, 2025).

Based on 2022 development progress data, most modules have reached the implementation and testing phases and were fully deployed by early 2023. This process demonstrates that the implementation of PRIMASI is carried out in phases through planning, development, training, and evaluation stages. This approach aligns with information system development models such as the System Development Life Cycle (SDLC), which emphasizes the importance of systematic

stages in technology development. In addition, the provision of training for teachers and staff prior to full implementation demonstrates a focus on user acceptance. This is important because the success of an information system's implementation is determined not only by technology but also by the readiness of human resources to use it. Overall, the implementation of PRIMASI at YPPSB reflects a digital transformation in educational management that leads to a paperless, real time, and integrated system. This transformation not only improves operational efficiency but also strengthens transparency and accountability in the management of educational institutions.

Description of Research Findings

a. Implementation of PRIMASI Based on the Information System Success Model

The analysis of the PRIMASI application implementation in this study is based on the information system success model by William H. DeLone and Ephraim R. McLean, which encompasses system quality, service quality, and information quality (DeLone, 2003).

PRIMASI Implementation Based on System Quality

a) Administrative Work Units

The implementation of PRIMASI in the Administrative Work Unit (UKA) demonstrates a transformation from a manual system to an integrated digital system. This aligns with the concept of administrative digitization, which enhances data efficiency and accuracy (Faizah, 2025). Research findings indicate that the rationale for implementing PRIMASI was driven by the need to improve the administrative system following an ISO audit. "...we need an application that will address those shortcomings while also making our work easier." [MP1] "...we want to transition all processes to digital." [MP2]. From a system quality perspective, PRIMASI provides integrated modules (HRMS, Finance, Assets, and Service) that can be accessed in real-time. This demonstrates the system's reliable and flexible characteristics. "All teacher data, employee data is here... we can also monitor attendance here..." [MP1]. The menu display on the manager's account reflects the integ single web-

Figure 1. The PRIMASI Dashboard View in the Administrative Unit

The ease of generating reports is also an indicator of the system's quality: "...you just print out the ledger... without having to write anything down." [MP1]. Furthermore, the system is used comprehensively: "All schools under YPPSB are required to use PRIMASI." [MP1]. This finding indicates that good system quality influences usage intensity and user satisfaction, as explained in DeLone model (2003).

b) Kindergarten Unit

The implementation of PRIMASI in the kindergarten unit shows that the system has been integrated into teachers' administrative activities. "We've been using the PRIMASI app for about three years now..." [GR3]. The system's features support various administrative services: "...from ordering supplies and requesting leave to viewing pay stubs all through PRIMASI." [GR3]. In terms of system quality, PRIMASI is considered user-friendly: "It's easy to understand, but it also depends on the internet..." [GR3]. However, there are technical challenges: "The challenge is when the internet connection is a bit spotty..." [GR3]. This indicates that system quality is determined not only by the application's design but also by the supporting infrastructure (DeLone, 2003).

c) Elementary School Units

The implementation of PRIMASI in elementary schools shows that the system is used routinely and has become part of the organization's work culture. "We use PRIMASI every day..." [KS2] The system supports facility management and administration: "...once it's in PRIMASI, other units look for another available slot." [KS2] Additionally, the system improves data accuracy: "...since it's in the system, the likelihood of errors is low." [TU2_KS] However, the main challenge remains the network: "The only issue is the internet." [GR1_KS]. These findings reinforce that a high-quality system can enhance work effectiveness, although it is still influenced by external factors (Riansih, 2025).

d) Junior High School Unit

The implementation of PRIMASI at the junior high school has led to a significant improvement in administrative management. "...documents used to get lost, but now everything is recorded..." [KS1]. The system has also streamlined services: "Leave, permissions, overtime everything goes through the system." [KS1]. However, there are still some limitations in terms of features: "...premium calculations are still done manually." [TU1] Overall, the quality of the PRIMASI system in junior high schools is rated as good because it has improved administrative efficiency and transparency.

Implementation Based on Service Quality

The qualit IT team's responsiver

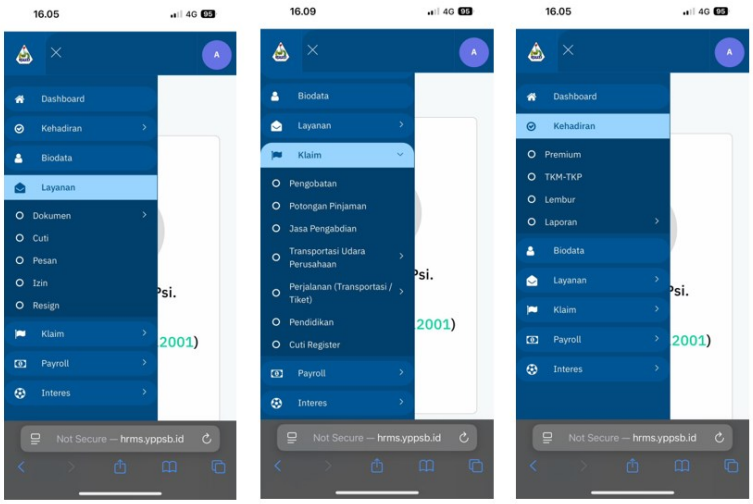

Figure 2. The Teacher Administration Menu in PRIMASI

a) Administrative Unit

Based on the responsiveness of the administrative and management teams, PRIMASI's services are coordinated by the foundation's IT team, which reports directly to the Manager of Research, Strategy, and Development (RSP). MP1, who serves as the RSP Manager, explained that PRIMASI operations are continuously monitored, and any issues are promptly addressed through internal coordination or with vendors: "If there's an issue, I'm the one who finds the solution." [MP1]. "Fast response, very accommodating." [MP1]. Service speed has also improved: "...accessible from anywhere." [MP2]. Research findings indicate that the quality of PRIMASI services at UKA YPPSB is demonstrated by the quick responses from the admin and IT teams, the speed of service in administrative and approval processes, the availability of assistance during technical issues, as well as more structured and transparent coordination between units through the system.

b) Preschool Unit

Based on interviews with kindergarten teachers, the use of PRIMASI has become part of daily administrative activities and is perceived as facilitating various non-instructional services. Based on feedback from the IT team, teachers reported that if they encounter issues with the system, the first step is to report it to the administrative office, which then forwards the issue to the IT team: "Report to the administrative office, then to IT..." [GR3] "The response is good, though not always immediate..." [GR3_KL]. Administrative services have become faster: "...no need to hand-deliver the paperwork." [GR3_KL]. Based on the research findings, the quality of PRIMASI services at YPPSB Kindergarten is evident in the fairly good response to support requests, the acceleration of administrative processes, and coordination between units facilitated through the system's mechanisms.

c) Elementary School Unit

Based on feedback from the internal IT team, the support provided is functioning well. If any issues arise while using the system, communication takes place directly. KS2 explained that: "The IT team is always supportive. For example, if there's a problem, we need to communicate. We reach out to the IT team via WhatsApp or phone, and they're always there to help." [KS2]. From the teachers' perspective, the ease of accessing personal administrative services and school activities demonstrates the quality of PRIMASI's services. GR1 noted that requests for leave, permissions, and activity proposals can now be managed more systematically and no longer rely on manual communication with the administrative office: "Before, if we wanted to check how much leave we had left, we had to ask first and wait for the administrative staff to respond. But now, whenever we want to check... we can just do it through PRIMASI." [GR1_KL]. Based on the research findings, the quality of PRIMASI's services at SD YPPSB is evident in the supportive response from the IT team, the acceleration of administrative processes, and the coordination between units facilitated through the system's mechanisms.

d) Junior High School Unit

Based on the research findings, the junior high school principal stated that technical support for the use of PRIMASI is provided through direct coordination with the internal IT team. If there are any system or network issues, the school immediately contacts the IT team for assistance: "Usually, we just let IT know right away..." [TU1_KL]. From a different perspective that of the teachers the ease of administrative access, which is part of the service quality, is characterized by being paperless and transparent. GR2 noted that the system simplifies personnel services and reduces reliance on physical documents: "It helps, though. What's it called? Clearly, it's paperless." [GR2]. Service quality enhances efficiency and coordination between units, which is an indicator of successful information system implementation (DeLone, 2003). Overall, the quality of PRIMASI services at SMP YPPSB is evident in the increased speed of administrative services, ease of coordination between units, and technical support from the IT team.

Implementation Based on Information Quality

a) Administrative Unit

The quality of PRIMASI's information is demonstrated through the accuracy and real-time nature of the data: "PRIMASI has four features for payroll, leave, and everything else in this HRMS. All teacher data and employee data are here" [MP1]. The same point was made by MP2, who stated that the data in PRIMASI is real-time and verified through a tiered approval mechanism: "It's very helpful because the data is real-time and verified directly by supervisors. Every request has an approval trail, so you can check who approved it and when." [MP2].

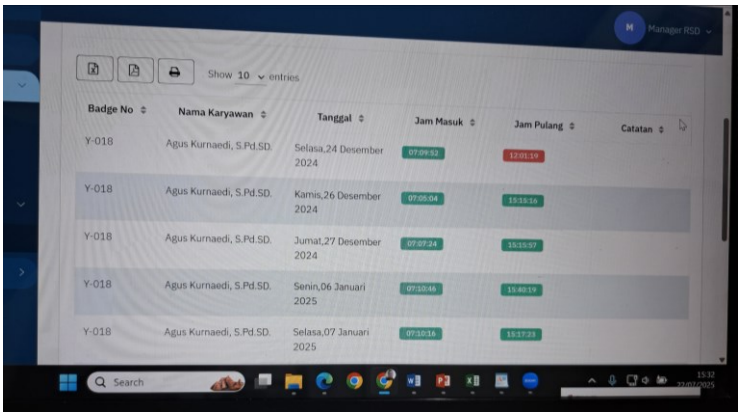

Figure 3. Teacher Attendance View in the Manager Account

Figure 3 shows the teacher's clock-in and clock-out times. If the time is green, attendance aligns with the scheduled work hours; if it is black, the teacher or employee did not clock out at the designated time. The information is also used for decision-making: Data in PRIMASI can serve as the basis for evaluation and decision-making. This was stated by MP2: "For example, if a teacher requests training, I can view their history in the system. That becomes the basis for evaluation and decision-making." [MP2]. Overall, the quality of PRIMASI information at UKA demonstrates that data is accurate, complete, available on time, and directly utilized by leadership for monitoring, evaluation, and decision-making in educational administration management.

b) Kindergarten Unit

The quality of PRIMASI information in the YPPSB Kindergarten Unit is assessed by how administrative data is recorded, presented, and utilized by users to support school administrative activities. Teachers enter their own data on teaching hours, allowances, and service requests, after which the data is verified by the administrative office and approved by the principal: "...The administrative office verifies it, then the principal approves it." [GR3] "...check salaries directly in PRIMASI." [GR3]

c) Elementary School Unit

The quality of information in the implementation of PRIMASI at the YPPSB Elementary School Unit can be seen in how administrative data is collected, presented, and utilized by the school principal, administrative staff, and teachers. The tiered data input and verification process ensures that the data in PRIMASI is accurate. The principal plays an active role in monitoring and approving incoming data: "I always monitor it through my approval." [KS2]. "Everything goes into the system." [TU2].

d) Junior High School Unit

The junior high school principal stated that all administrative data ranging from leave, permissions, excess teaching hours, and overtime to proposals for school activities has been systematically recorded in the system. “Everything has been recorded and can be tracked.” [KS1]. “...you can monitor the approval process.” [GR2]. The research results indicate that the implementation of PRIMASI has met the three main dimensions of information system success according to the DeLone & McLean model, namely:

1. System Quality: an integrated, real-time, and user-friendly system
2. Service Quality: responsive IT support and effective coordination
3. Information Quality: accurate, complete, and decision-supporting data

However, there are several challenges, such as:

- dependence on an internet connection
- certain features are not yet fully automated
- limited access for certain users

These findings are consistent with previous research indicating that the success of information systems depends not only on technology, but also on human factors and infrastructure (Venkatesh et al., 2003).

Supporting Factors and Challenges in the Implementation of PRIMASI

Research findings indicate that the success of information system implementation is determined not only by the quality of the technology but also by organizational, human, and environmental factors. This aligns with the information system success model proposed by William H. DeLone and Ephraim R. McLean, which emphasizes the importance of organizational support and service quality in determining system success (DeLone, 2003).

Supporting Factors for the Implementation of PRIMASI

a. Management Support

The key factor supporting the implementation of PRIMASI is the foundation management’s strong and consistent commitment. PRIMASI has been designated as a mandatory system for all school units, thereby establishing uniform usage standards. “All schools under YPPSB are required to use PRIMASI.” [MP1]. In addition to policy, management also conducts continuous monitoring of system operations: “I continuously monitor the operation of PRIMASI...” [MP1]. At the school level, this support is manifested in the form of oversight through an approval mechanism: “There are no days off for approvals... because if they aren’t processed, people won’t get paid.” [KS1]. These findings indicate that management support serves as a critical success factor in the implementation of information systems (Top Management Support) (Riansih, 2025).

b. Human Resource Readiness

Human resource readiness is a key factor in the successful implementation of PRIMASI. Although users initially faced difficulties, the adaptation process proceeded gradually. “At first, things were still chaotic... but by the second year, things had started to fall into place.” [SP1]. “Now everyone understands and things are running smoothly.” [KS1]. “We just need to adapt and get used to it.” [GR2]. This indicates that technology acceptance increases with usage experience, consistent with Fred D. Davis’s Technology Acceptance Model (Davis, 1989).

c. Infrastructure Readiness

The availability of work devices is a key supporting factor in system implementation. The foundation and school units have provided work devices such as computers, laptops, and tablets to support PRIMASI operations: “I have my own computer.” [TU1]. “Computers are available.” [TU2] “Classroom teachers were given tablets.” [GR3]. These interview findings are reinforced by field observations showing that administrative staff have been equipped with adequate work devices and actively use them for daily administrative data entry and verification through PRIMASI. The availability of this infrastructure supports the effective use of the system and accelerates the administrative digitization process (Kamalia, 2022).

d. Digital Work Culture

The implementation of PRIMASI also fosters a more disciplined and data-driven work culture: “Now all teachers are disciplined about entering leave requests, sick leave...” [TU1] “...now we can see remaining leave days directly in PRIMASI.” [GR1] This demonstrates that information systems can transform organizational work behavior toward being more structured and accountable (Venkatesh et al., 2003).

e. Vendor and IT Team Support

External support from vendors and internal support from the IT team are key factors in maintaining system sustainability: “Fast response, very accommodating...” [MP1]. “If there are any issues, we contact the vendor right away.” [MP1]. In addition, the internal IT team also has the capability to handle technical issues independently, which enhances the organization’s self-reliance.

f. Training and Socialization

Training is conducted in phases and on an ongoing basis to ensure all users understand the system: “We were all taught how to use the application...” [KS2] “There is training per unit...” [GR2] “The IT team teaches all employees...” [MP1]. This training plays a crucial role in enhancing user competence and reducing resistance to change (Schwab, 2016).

Challenges in Implementing PRIMASI

a. Technical Challenges

The main challenges faced are internet connectivity and server capacity. “Sometimes there are internet connection issues.” [MP2] “If the network is slow, work gets delayed.” [KS1] “If it crashes, the server goes down...” [SP2] Observations also indicate that network issues occur at all organizational levels, including management. This suggests that the success of an information system heavily depends on adequate technological infrastructure (Faizah, 2025).

b. Non-Technical Challenges

Non-technical challenges include digital literacy and user discipline. “At first... people weren’t used to using digital systems.” [KS1] “Sometimes teachers forget to enter data...” [MP2] “Not everyone is disciplined.” [KS2]. Additionally, there are differences in technological proficiency among users: “...older users are sometimes less tech-savvy.” [SP1]. These findings indicate that human factors are the primary challenge in information system implementation (Venkatesh et al., 2003).

Efforts to Overcome Challenges

Various efforts have been made to overcome the challenges of implementing PRIMASI, both technical and non-technical.

a. Training and Mentoring

Some of the challenges encountered during the implementation of PRIMASI have already been resolved. One example is the variation in digital literacy levels; in addition to receiving training, teachers and staff members help one another if anyone is still confused about using PRIMASI: “Every new employee goes through an induction.” [KS1_UMK] “Those who don’t understand ask, and those who do help.” [KS2_PP]. This approach demonstrates the presence of a learning organization in the system’s implementation.

b. Quick Response from the IT Team

In addition, management and the IT team respond quickly whenever an issue hinders work: “If there’s a problem, contact the IT team.” [KS1_UMK]. “I look for solutions with the vendor...” [MP1_UMK]. This quick response builds user confidence in the system.

c. Strengthening Internal Capacity

“The IT team learns from the vendor... so we aren’t too dependent.” [MP1_UMK]. This strategy is crucial for the system’s long-term sustainability. The implementation of PRIMASI at YPPSB is supported by strong organizational and technological factors, yet it still faces both technical and non-technical challenges. The efforts undertaken demonstrate that a collaborative approach between management, users, and the IT team is key to the successful implementation of information systems in an educational setting.

Discussion

Implementation of PRIMASI in Educational Administration Management at YPPSB

The implementation of PRIMASI at YPPSB can be explained using the DeLone (2003) model, which encompasses system quality, information quality, service quality, usage, user satisfaction, and net benefits. These six dimensions are interrelated in determining the success of an information system.

a) System Quality

PRIMASI possesses good system quality in terms of ease of use, feature integration, and alignment with administrative needs. The system is capable of replacing manual processes with more efficient and structured ones. Good system quality has been shown to drive usage and user satisfaction while generating organizational benefits (Wara et al., 2021). Although mandatory, PRIMASI is still accepted because it provides tangible benefits to users.

b) Service Quality

PRIMASI's service quality is strong, characterized by the IT team's quick response and accommodating vendor support. Clear, multi-tiered service mechanisms allow issues to be addressed effectively. This enhances user trust, usage, and satisfaction (Natasya, 2024). Service quality also helps mitigate technical limitations such as network issues.

c) Information Quality

PRIMASI generates accurate, complete, real-time, and well-documented information through a multi-tiered verification system. This information supports monitoring and data-driven decision-making. High-quality information encourages system usage and user satisfaction while enhancing transparency and accountability (Putra, 2024). The implementation of PRIMASI has yielded varying results across units. Elementary schools (SD) have achieved the most optimal results due to consistent use and strong management support, while kindergartens (TK) and junior high schools (SMP) still face technical and operational challenges. This indicates that the success of implementation is influenced by leadership, discipline, and infrastructure readiness.

Implications for Administrative Efficiency

PRIMASI has proven to improve educational administrative efficiency through the digitization of work processes that are faster, more integrated, and more transparent.

This system enables more accurate data management and supports objective and accountable data-driven decision-making. The resulting efficiency also allows educators to focus more on teaching activities, thereby contributing to improved educational service quality (Wahyuni et al., 2025).
In its implementation, the success of PRIMASI is supported by various interrelated factors, such as management commitment, human resource readiness, infrastructure availability, the development of a digital work culture, vendor support, top-down policies, and ongoing training. The synergy of these factors enables the system's implementation to proceed consistently and effectively (Sarumpaet, 2024). However, the implementation of PRIMASI also faces several challenges. From a technical perspective, the main obstacles include internet network instability and server capacity limitations, which affect the smoothness of system access. Meanwhile, from a non-technical perspective, challenges arise in the form of variations in users' digital literacy as well as discipline in data input and management (Zulfa et al., 2025).

To address these challenges, the foundation has undertaken various improvement efforts, such as ongoing training, technical support from the IT team, collaboration among users, and capacity building for the internal technology team. These efforts reflect the application of the principle of continuous improvement, where the system is continuously developed and refined to maintain the effectiveness of its implementation in supporting educational administration (Ramdhani, 2025).

4. Conclusion

Based on the research findings and discussion, the implementation of the PRIMASI application-based Management Information System within the Prima Swarga Bara Education Foundation (YPPSB) has been fully implemented and has made a tangible contribution to supporting the quality of educational services, particularly in administrative aspects. PRIMASI is utilized as the primary system for managing teacher and staff administration, characterized by ease of information access, improved data accuracy, enhanced workflow efficiency, and the integration of administrative processes into a digital workflow. Through this implementation, administrative processes have become more orderly, transparent, and well-documented, thereby supporting data-driven decision-making. Although the level of utilization is not yet fully consistent across every unit, overall PRIMASI has demonstrated a strategic role in improving the quality of educational services within the YPPSB environment.

In addition, the implementation of PRIMASI is influenced by various supporting factors and dynamic challenges, with the supporting factors tending to be more dominant. Foundation policy support, management commitment, guidance from the information technology team, training implementation, and the availability of devices are the primary factors that strengthen the success of the system's implementation. On the other hand, the challenges that arise include network disruptions, limitations in system stability at certain times, the initial adaptation process of human resources, and user discipline in data entry. However, these

challenges are technical and adaptive in nature, so they do not hinder the overall implementation. Through continuous guidance, familiarization with the system, and consistent managerial support, these various obstacles can be overcome so that PRIMASI operations continue to run smoothly.

References

Bahar, B. (2021). Pengembangan Model Sistem Informasi Manajemen Pengelolaan Artikel Ilmiah Berbasis Web Menggunakan Metode Extreme Programming. *Jutisi : Jurnal Ilmiah Teknik Informatika dan Sistem Informasi*, *9*(3), 1–12. https://doi.org/10.35889/jutisi.v9i3.537

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS quarterly*, *13*(3), 319-340.

DeLone, W., & McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, *19*(4), 9–30.

Faizah, I., & Sri Budi Herawati, E. . (2025). The Effect of Transformational Leadership of School Principals and the Role of Management Information Systems on Organizational Commitment and Its Implications for the Development of Teacher Professionalism at SMPN Dayun District. *Journal of Educational Sciences*, *9*(6), 6477-6493. https://doi.org/10.31258/jes.9.6.p.6477-6493

Faizal, M. I., Intan, V. N., & Firmansyah, R. (2021). Analisis Sistem Informasi Manajemen Bagi Pendidikan di Masa Pandemi Covid-19. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi)*, *7*(1), 9–16. https://doi.org/10.35870/jemsi.v7i1.512

Farida, A., Wahyono, R., & Supanto, F. (2021). Model Sistem Informasi Manajemen Terpadu untuk Meningkatkan Mutu Layanan Pendidikan. *Jurnal Administrasi Dan Manajemen Pendidikan*, *4*(1), 24–31. https://doi.org/10.17977/um027v4i12021p24

Gagaramusu, Y., Afika, N., Zulnuraini, Z., & Khairunnisa, K. (2025). Analysis of School Library Management at SD Inpres 1 Tanamodindi. *Journal of Educational Sciences*, *9*(5), 3398-3411. https://doi.org/10.31258/jes.9.5.p.3398-3411

Hidayat. (2023). *Manajemen Mutu Pendidikan* (S. Rokhmawanto (ed.)). PT Arr Rad Pratama.

Jumriani. (2023). Implementasi Sistem Informasi Manajemen Akademik Dalam Meningkatkan Mutu Layanan di MAN Pinrang Akademik Dalam. *EdiumJurnal Manajemen Pendidikan Islam*, *1*(1), 11–20.

Juran, J. M., & Godfrey, A. B. (1998). Juran's Quality Handbook. In R. Hoogstoel & E. Schilling (Eds.), *Journal of the American Statistical Association* (Fifth, Vol. 47, Issue 258). McGraw-Hill. https://doi.org/10.2307/2280757

Kamalia, K., Natuna, D. A., & Sumarno, S. (2022). The Influence of Principal Leadership and Teacher Work Discipline on Elementary School Teacher Performance. *Journal of Educational Sciences*, *6*(3), 444-458. https://doi.org/10.31258/jes.6.3.p.444-458

Loryana, D., & Haq, M. S. (2021a). Implementasi Sistem Informasi Manajemen dalam Meningkatkan Pelayanan Pendidikan Sekolah di Masa Pandemi Covid-19. *Jurnal Inspirasi Manajemen Pendidikan*, *9*(5), 1221–1235.

https://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/view/44477%0Ahttps://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/download/44477/37857

Lubis, H., & Aulia, T. Y. (2024). Efektivitas Penerapan Sistem Informasi Manajemen di SMPS Galih Agung Deli Serdang dalam Peningkatan Kualitas Pendidikan. *ITQAN:Jurnal Ilmu Ilmu Kependidikan*, *15*(1), 87–98. https://doi.org/https://doi.org/10.47766/itqan.v15i1.2420

Ma'arif, M. A. (2016). Manajemen Mutu Pendidikan. *At-Ta'lim*, *2*(2), 39–62.

Marlina, L., & Nugraha, M. S. (2024). Pemanfaatan Sistem Informasi Manajemen untuk Meningkatkan Kualitas Layanan Pendidikan di MTS PPI 50 Lembang. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(4), 128–153. https://doi.org/https://doi.org/10.23969/jp.v9i04.19793

Mu'in, A. (2023). Manajemen Mutu Pendidikan. In H. Rahman (Ed.), *Sustainability (Switzerland)* (Cetakan I, Vol. 11, Issue 1). IAIN Madura Press. http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_Sistem_Pembetungan_Terpusat_Strategi_Melestari

Mulyono, M., & Bashori, S. (2023). Pemanfaatan Aplikasi Primasi di YPPSB dalam Penyelenggaraan Layanan Pendidikan Berbasis Digital. *An-Nadzir : Jurnal Manajemen Pendidikan Islam*, *1*(02), 76–91. https://doi.org/10.55799/annadzir.v1i02.281

Natasya, T., & Farozi, M. (2024). Analisis Kesuksesan Sistem Dapodik dengan Model Delone dan McLean pada SMA Kabupaten Ogan Komering Ilir. *Jurnal Teknologi Informatika dan Komputer MH. Thamrin*, *10*(1), 29–39. https://doi.org/https://doi.org/10.37012/jtik.v10i1.1845 Abstrak

Prasetiyo, S. M., Fikri, A., Algazali, H., Alkhowarizmi, T. A., & Fachuzi, R. (2024). Implementasi Sistem Informasi Manajemen Berbasis Web untuk Meningkatkan Efektivitas Pengelolaan Data di SMK Tonjong Bogor. *JORAPI: Journal of Research and Publication Innovation*, *2*(3), 1797–1801. https://doi.org/https://jurnal.portalpublikasi.id/index.php/JORAPI/index

Purnomo, P., & Mulyasa, E. (2013). Implementasi Kurikulum 2013 dalam Pembelajaran di Sekolah Dasar. In *Seminar Nasional Implementasi Pembelajaran Tematik dalam Mengoptimalisasi Kurikulum*.

Putra, N. P., & Retnowardhani, A. (2024). Unlocking User Satisfaction: A DeLone & McLean IS Success Model Approach To IT Helpdesk Ticketing System Adoption. *Journal of Applied Engineering and Technological Science*, *6*(1), 610–625.

Rahmadi, F., Munisa, M., Rozana, S., Rangkuti, C., Ependi, R., & Harianto, E. (2021). Pengembangan Manajemen Sekolah Terintegrasi Berbasis Sistem Informasi di Sumatera Utara. *Fitrah: Journal of Islamic Education*, *2*(2), 96–109. https://doi.org/10.53802/fitrah.v2i2.64

Rahman, W., & Saudin, L. (2022). *Sistem Informasi Manajemen* (N. Sri Wahyuni (ed.)). Widina Bhakti Persada Bandung.

Ramdani, D. M. (2020). Pengaruh Sistem Informasi Manajemen terhadap Mutu Layanan Pendidikan. *Indonesia Journal of Education Management & Adminitrasion View*, *4*(1), 229–234. https://kumparan.com/alita-rifa-

savira/pengaruh-sistem-informasi-manajemen-terhadap-perusahaan-1uppdD2eOkQ

Ramdhani, D. (2025). Pendampingan Pemanfaatan Sistem Informasi Manajemen dalam Pengelolaan Data Peserta Didik di SMP Al Munawwaroh Rejoso. *FILANTROPIS: Jurnal Pengabdian Kepada Masyarakat*, *01*(02), 120–129.

Riansih, R., Sriati, M.S., S. M., & Iriani, A. (2025). User Perceptions of Academic Service Satisfaction at FKIP Sriwijaya University: SIMAK Version 3.0. *Journal of Educational Sciences*, *9*(4), 2550-2561. https://doi.org/10.31258/jes.9.4.p.2550-2561

Rusdiana, A. (2019). *Sistem Informasi Manajemen Pendidikan: Konsep, Prinsip dan Aplikasi* (Muhardi & T. Nurhayati (eds.)).

Sallaby, A. F., & Kanedi, I. (2020). Perancangan Sistem Informasi Jadwal Dokter Menggunakan Framework Codeigniter. *Jurnal Media Infotama*, *16*(1).

Sallis, E. (2002). Total Quality Management in Education. In *Developing quality systems in education*. Kogan Page. https://doi.org/10.4324/9780203423660_chapter_5

Sanoto, H., Kusuma, D., Paseleng, M. C., & Triwijayanti, N. (2025). Digitalizing School Management : Achieving Excellence through Technology Integration in Primary Schools in Indonesia. *Al-Ishlah: Jurnal Pendidikan*, *17*(1), 478–488. https://doi.org/10.35445/alishlah.v17i1.6341

Sarumpaet, A. F., & Firdaus, R. (2024). Implementasi Sistem Informasi Manajemen pada Lembaga Pendidikan atau Sosial Formal. *Merkurius : Jurnal Riset Sistem Informasi dan Teknik Informatika*, *2*(4), 194–207. https://doi.org/https://doi.org/10.61132/merkurius.v2i4.163

Schwab, K. (2016). The fourth industrial revolution. In *World Economic Forum* (Vol. 12).

Siregar, R. W., Usnur, U. H., Rahayu, R., Miranda, N., Dewi, M. S., Alfarisi, S., Adriana, M., Ramadhansyah, M., Suriono, Z., Rinaldi, R., Batubara, M. S., Arifin, Z., Nabila, A., Ridwan, F., Amin, A., Tamiang, Y., Widiastuty, R., Nst, W. R., Vahlevi, I. A., & Ritonga, M. (2022). *Manajemen Mutu Terpadu Pendidikan* (Syafaruddin & M. Syukri (eds.)). CV. Pusdikra Mitra Jaya.

Sugiyono. (2023). *Metode Penelitian Kombinasi (Mixed Methods)* (Sutopo (ed.)). Alfabeta.

Vaidya, S., Ambad, P., & Bhosle, S. (2018). Industry 4.0–a Glimpse. *Procedia Manufacturing*, *20*, 233-238.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View1. *MIS quarterly*, *27*(3), 425-478.

Wahyuni, E. I., Muthmainnah, F., Permana, B., & Novalima, T. (2025). Pengembangan Sistem Informasi Manajemen Sekolah Berbasis Web untuk Meningkatkan Efisiensi Administrasi Pendidikan. *URANUS : Jurnal Ilmiah Teknik Elektro, Sains Dan Informatika*, *3*(2), 65–76. https://doi.org/https://doi.org/10.61132/uranus.v3i2.802

Wara, L. S., Kalangi, L., & Gamaliel, H. (2021). Pengujian Model Kesuksesan Sistem Informasi DeLone dan McLean pada Sistem Aplikasi Pemeriksaan (SIAP) di Badan Pemerika Keuangan Republik Indonesia Perwakilah Provinsi Sulawesi Utara. *Jurnal Riset Akuntansi Dan Auditing*, *12*(1), 1–15.

Wijaya, A. R., Siregar, M., & Kartika, D. (2023). Perencanaan Strategis Sistem Informasi sebagai Pendukung Optimalisasi Layanan Pendidikan di Sekolah Dasar. *Dirasisi: Direktori Analisis Strategi dan Implementasi Sistem Informasi*, *1*(1), 1–12.

Wijaya, W. M., & Risdiansyah, D. (2020). Dampak Implementasi Sistem Informasi Manajemen Pendidikan pada Kegiatan Akademik di Sekolah. *Jurnal Penelitian Pendidikan*, *20*(1), 129–135. https://doi.org/10.17509/jpp.v20i1.24564

Yaumi, M., & Usman. (2021). *Sistem Informasi Manajemen Pendidikan: Transformasi Organisasi, Pengelolaan Sumber Daya dan Aplikasi Sistem* (Bahraeni (ed.); I). Alauddin University Press. http://ebooks.uin-alauddin.ac.id/

Zulfa, A. A., Ibrahim, T., & Arifudin, O. (2025). Peran Sistem Informasi Akademik Berbasis Web dalam Upaya Meningkatkan Efektivitas dan Efisiensi Pengelolaan Akademik di Perguruan Tinggi. *Jurnal Tahsinia*, *6*(1), 115–134.

How to cite this article:

Putri, F. N. W., & Sutapa, M. (2026). Implementation of the Primasi Application-Based Management Information System to Support the Quality of Educational Services at the Prima Swarga Bara Education Foundation, East Kutai Regency. *Journal of Educational Sciences*, *10(5)*, 443-461.