

The Role of Management Information Systems in Improving Islamic Education Services and Job Satisfaction in Madrasah

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Abstract:

This study aims to analyze the use of Management Information Systems (MIS) in improving the quality of educational services and job satisfaction at Madrasah. The research employs a mixed methods approach with a sequential exploratory design, beginning with qualitative methods through observation, interviews, and documentation, followed by quantitative analysis using questionnaires distributed to 285 respondents. Qualitative data were analyzed using the Miles and Huberman interactive model, while quantitative data were examined through simple and multiple linear regression with SPSS. The qualitative findings indicate that MIS supports administrative efficiency, provides accurate data, and enhances service quality and job satisfaction across five key aspects: responsiveness, assurance, tangibles, empathy, and reliability. However, challenges such as limited infrastructure and user adaptability remain. Quantitatively, statistical tests show that MIS has a significant impact on both service quality and job satisfaction, as indicated by the F-value (2.679) exceeding the F-table value (2.410) with a significance level of $0.00 < 0.05$. This study emphasizes the importance of a comprehensive and sustainable MIS implementation strategy to support the educational vision at Madrasah.

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Introduction

The transformation of the national education system through the transition from the 2013 Curriculum to the Merdeka Curriculum reflects the government's commitment to creating adaptive, creative, and competitive learners. This curriculum is designed to make learning more contextual and student-centered, which demands efficient administrative and management systems. In this context, the use of information technology is essential as a supporting tool in educational institution management. Information technology can accelerate information delivery, improve data accuracy, and support timely decision-making. Thus, integrating technology into education management not only increases efficiency but also serves as an essential indicator of education service quality. As a result, the development of a Management Information System (MIS) becomes a strategic necessity for every educational institution ([Laudon & Laudon, 2021](#); [Davis, 2023](#); [Yakub & Hisbanarto, 2014](#)).

Management Information Systems are a combination of managerial processes, information technology, and human resources designed to manage organizational information effectively. In the field of education, MIS plays a crucial role in managing data on students, teachers, curricula, finance, and other administrative functions digitally ([Mutohar, 2023](#)). With MIS, educational institutions can provide real-time information, which accelerates strategic decision-making processes. In addition, MIS supports transparency and accountability in institutional management, especially in the digital era that demands quick responses to users' needs. The effectiveness of this system depends largely on the compatibility between the technology used and the competency of the human resources operating it ([Arifudin, 2021](#); [Prasojo, 2013](#); [Handayani et al., 2020](#)). Therefore, strengthening the capacity of staff and teachers in using MIS is a key factor in the successful implementation of educational technology.

The implementation of MIS in the Indonesian education sector has received strong regulatory support from the government. For example, Government Regulation No. 11 of 2008 on Electronic Information and Transactions states that information technology development must be optimized to educate the nation. In the education sector, the Ministry of National Education Regulation No. 20 of 2006 emphasizes the need for computer-based information systems to simplify administration and support decision-making. Furthermore, Ministry of Education and Culture Regulation No. 47 of 2023 states that each secondary education unit must have a management standard that includes MIS implementation ([Sutedjo Dharma, 2002](#); [Rochaety, 2008](#); [Junaris, 2024](#)). These regulations indicate that the government recognizes MIS as a key component in improving the quality of education services. Effective implementation will help schools face globalization and digital transformation challenges optimally.

However, in practice, not all educational institutions are able to implement MIS effectively. In many schools, including Madrasah, several obstacles such as infrastructure limitations, lack of training, and resistance to technological change are often encountered. These challenges affect service quality and job satisfaction among staff and teachers. The gap between the potential benefits of MIS and its actual implementation causes the system to operate below its optimal capacity. Some users experience difficulties in accessing or using the system due to a lack of digital skills. This condition highlights the need for a

comprehensive and continuous implementation strategy to ensure that the benefits of MIS are fully realized by all elements of the institution.

Service quality in educational institutions reflects the overall effectiveness of institutional management. Fast, accurate, and responsive services are necessary to meet the expectations of students, parents, and educators. MIS has the potential to provide high-quality services by delivering complete and real-time data. When implemented optimally, this system can enhance public trust and strengthen the institution's reputation. However, service quality is not solely determined by the availability of technology but also by how professionally the technology is operated. Therefore, intensive training and human resource capacity building are essential components of a strategy to improve service quality through MIS ([Siagian, 2016](#); [Laudon & Laudon, 2021](#); [Suardi, 2004](#)).

On the other hand, job satisfaction among staff and teachers is also a critical indicator of educational institution success. Job satisfaction is closely related to the work environment, workload, and systems that support daily tasks. Well-implemented MIS can simplify administrative work, reduce manual workload, and increase efficiency. This will have a positive impact on job satisfaction and motivation, which in turn improves staff productivity and loyalty ([Helmawati, 2015](#); [Efendi, 2014](#); [Tasif, 2015](#)).

Despite the growing number of studies examining MIS in general educational settings, there remains a significant research gap when MIS is explored specifically within the context of Islamic education, particularly in madrasahs. Existing MIS research in public schools largely focuses on technical, administrative, and managerial aspects, such as system efficiency, data accuracy, and administrative automation. Those are without addressing the unique characteristics of Islamic educational institutions, which include religious values, spiritual culture, and additional administrative responsibilities linked to Islamic programs. Studies conducted by [Mu'min & Nugraha \(2024\)](#) the implementation of MIS as a crucial strategy to enhance administrative efficiency, transparency, and the quality of educational services. Besides, [Zheng \(2024\)](#), highlight the role of digital competence and technological readiness in MIS success.

Furthermore, empirical evidence regarding the influence of MIS on job satisfaction among madrasah teachers is still limited, even though their workloads are often heavier due to religious extracurricular activities and spiritual guidance duties. In addition, no existing research presents a comprehensive MIS model tailored to support Islamic curriculum management, documentation of religious activities, and monitoring of students' spiritual development. Therefore, more studies are needed to understand how MIS can be aligned with both Islamic education services and teacher job satisfaction in madrasahs.

Based on these gaps, this study aims to examine how MIS can improve service quality and job satisfaction in madrasah. This research is important because it shows how information technology can support educational goals while addressing challenges such as limited digital skills and inadequate infrastructure. Using a sequential exploratory mixed-methods design, this study seeks to provide a clear understanding of MIS implementation in madrasah. The results are expected to help improve administrative services, guide school management policies, and provide a reference for future MIS development in other educational institutions. Through this effort, madrasah may become

a model for building adaptive and responsive MIS systems in modern educational settings.

Research Method

This research uses an approach *Mixed Methods* with design *Sequential Exploratory*, which is a combination of qualitative and quantitative methods sequentially. In the first stage, a qualitative approach was used to explore in depth information about the Management Information System at Madrasah. The researcher acted as the main instrument, conducting participatory observations, in-depth interviews, and documentation of the head of the madrasah, administrative staff, teachers, and students. The data analysis technique follows the interactive model of Miles and Huberman which includes: data collection, data condensation, data presentation, and drawing conclusions. The validity of the data was tested through credibility, transferability, dependability, and confirmability tests to ensure the validity and objectivity of the research results.

The second stage used a quantitative approach, with a population of all Madrasah students totaling 1,074 students. The sample was taken by simple random sampling (*simple random sampling*) as many as 285 students based on the Krejcie and Morgan Table. The instrument used was a closed questionnaire with a Likert scale to measure students' perceptions of the management information system and its impact on service quality and job satisfaction. The data were analyzed using simple and multiple linear regression tests, with prerequisite tests including normality, homogeneity, and linearity tests. The following is a table of the distribution of the number of students and samples:

Table 1. Number of Population and Sample of Students of Madrasah

Class	Number of Students	Sample Percentage (%)	Number of Samples
VII	362	26,5%	96
VIII	351	26,5%	94
IX	361	26,5%	95
Total	1.074		285

Results and Discussion

The implementation of Management Information Systems (MIS) at Madrasah aims to support the overall improvement of educational service quality. The planning of MIS begins with identifying information needs that are relevant to academic and managerial activities. This involves mapping work processes and selecting appropriate technologies that align with the institution's capacity and vision. The system is designed to integrate with the institution's strategic objectives and support data-driven decision-making. The school's vision and mission documents serve as the foundation to ensure system development aligns with institutional direction. The planning process is not only technical but also considers the readiness of human resources ([Sulistyorini, 2024](#)). Therefore, MIS becomes a strategic tool in managing educational institutions more efficiently.

In its implementation, the MIS at Madrasah is used for various activities such as student data management, attendance, finance, and curriculum. Interviews with the head of school and teachers indicate that the system facilitates work processes and enhances transparency. The system also provides real-time access to information that supports efficiency and effectiveness for teachers and administrative staff. Utilizing a single

integrated platform reduces reliance on manual records and speeds up academic evaluations. Users report that data access is now easier, faster, and more accurate. As a result, teachers can focus more on teaching rather than administrative burdens. The system also contributes to a more structured and professional working environment.

In terms of supervision and monitoring, the MIS allows school leaders to easily oversee performance and institutional progress. Through digital dashboards and reports, principals can review teaching activities, attendance, and evaluations of both students and teachers. The system is regularly evaluated through user feedback and feature adjustments based on evolving needs. Features such as grade summaries, financial tracking, and e-learning integration further strengthen service quality. Moreover, the flexibility of the system allows integration with external platforms like EMIS and Simpatika. This synchronization ensures accurate data alignment with government institutions. With better control mechanisms, institutional governance can be more systematic and transparent.

Despite these advantages, the implementation of MIS faces several challenges, including limited technological infrastructure and a lack of training for some educators. Some users experience difficulty navigating certain features due to limited digital experience. To overcome this, the school routinely conducts training and provides technical assistance. Active user participation is key to the continuous improvement of the system. Accessibility via devices such as computers and smartphones is also a major consideration in the system's design ([Masruroh et al., 2022](#)). The MIS interface is built to be intuitive and user-friendly to accommodate all stakeholders. With this approach, the school fosters a system that is inclusive and adaptive to change.

Overall, the MIS at Madrasah has made a tangible contribution to improving the quality of educational services. The system serves not only as an administrative tool but also as the foundation for strategic, data-driven decision-making. Positive impacts have been felt by teachers, staff, and students in terms of time efficiency, information access, and work quality. Observations and interviews reveal that MIS has helped cultivate a transparent and measurable work culture. With both internal and external support, the school has effectively optimized technology to support educational digital transformation. The implementation aligns with global trends where MIS is shown to improve institutional efficiency ([Alharbi et al., 2023](#); [Hassan, 2023](#); [Sunarya, et al., 2025](#); [Marlina & Nugraha, 2024](#)).

a. Multiple Linear Regression Analysis

This study used multiple linear regression analysis. Multiple linear regression is an analytical technique for determining the relationship between several independent variables and a dependent variable. This study has the following multiple linear regression equation:

$$Y = a + b_1X_1 + b_2X_2 + \dots$$

Information :

AND = Job Satisfaction

a = Constant Coefficient

b_1X_1 = Management Information System regression coefficient

b_2X_2 = Service Quality Regression Coefficient

Table 2. Multiple Linear Regression Analysis

Model	Coefficients ^a			t	Sey.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1	(Constant)	25.331	2.632	9.625	.000
	Management Information System	.034	.049	.041	.494
	Quality of Service	.051	.052	.058	.334

a. Dependent Variable: Job Satisfaction

The results of the multiple linear regression analysis presented in Table 2 show that both the Management Information System and Quality of Service variables have positive coefficients in predicting Job Satisfaction. The constant value of 25.331 indicates that, even in the absence of changes in both independent variables, employees' job satisfaction remains relatively high. The Management Information System variable has a coefficient of 0.034, suggesting a positive but weak relationship with job satisfaction. This means that improvements in the management information system are associated with slight increases in job satisfaction, although the effect is statistically insignificant ($p = 0.494$). Similarly, the Quality of Service variable has a coefficient of 0.051, also demonstrating a positive yet insignificant influence on job satisfaction ($p = 0.334$). These findings imply that, while both variables conceptually contribute to enhancing job satisfaction, their effects in this sample are relatively limited.

These results suggest that MIS and Service Quality alone are not enough to significantly increase job satisfaction. Other factors may play a more important role, such as teamwork, leadership, work environment, and employee motivation. Previous studies also show that MIS increases satisfaction only when employees receive enough support and training (Rahimi & Gunlu, 2016). Likewise, Service Quality tends to impact satisfaction when the organization provides good communication and supportive management (Rita, Oliveira, & Farisa, 2019). Therefore, organizations may need to strengthen internal culture, leadership, and employee engagement to make MIS and Service Quality more effective in improving job satisfaction.

b. ANOVA or Simultaneous Test (f)

The F-test or simultaneous test is used for planning, implementation, evaluation, and follow-up simultaneously to explain the quality of education. The F-test can be conducted by comparing the F-values_{count} with F_{table} at a significance level of ≤ 0.05 with the basis for decision making being if the calculated F is greater than or equal to the F_{table} and the value $p-value$ F-statistic is less than 0.05 then H_a accepted and H_0 rejected. On the other hand, if F_{count} less than or equal to F_{table} and value $p-value$ F-statistic is greater than 0.05 then H_a is rejected and H_0 accepted.

Table 3. Use ANOVA

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Say.	
1 Regression	16.119	2	8.059	2.679	.000 ^b	
Residual	3348.709	282	11.875			
Total	3364.828	284				

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Service Quality, Management Information System

Based on the table above, it is known that F_{count} 2.679 $> F_{table}$ 2.410 with a significance level of 0.000 which is smaller than 0.05, it can be concluded that H_a accepted and H_0 rejected. This means that there is a simultaneous influence between the management information system and service quality on job satisfaction at Madrasah.

The findings of this study also show that MIS and Service Quality have a combined significant effect, even though individually they may not strongly influence job satisfaction. This supports by [Osodo & Jemaiyo, \(2015\)](#), who found that MIS increases satisfaction when used together with good organizational support. by [Alzaanin & Sulaiman, \(2023\)](#) also explained that MIS becomes more effective when integrated into daily work processes. Similarly, by [Suryani, Kurhayadi, & Susniwati, \(2023\)](#) found that service quality improves employees' comfort and motivation, which strengthens satisfaction. In the context of madrasahs, where teachers face additional administrative and religious responsibilities, a combination of functional MIS and good service quality helps reduce workload, makes tasks easier, and improves overall job satisfaction.

c. Partial Test (t)

The t-test or partial test is used to determine the effect of the independent variable individually on the dependent variable. The t-test can be performed by comparing t_{count} with t_{table} . The basis for decision making is if t_{count} greater than t_{table} and p -value less than 0.05 then H_a accepted and H_0 rejected. Conversely, if t_{count} less than t_{table} and p -value greater than 0.05 then H_0 accepted and H_a rejected.

Table 4. Partial Test (t)

Model	Coefficients ^a			t	Say.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	25.331	2.632		9.625	.000

Management Information System - Service Quality	.834	.149	.741	1.684	.000
Management Information System - Job Satisfaction	.851	.152	.758	1.969	.000

a. Dependent Variable: Service quality, Job Satisfaction

Table 4 presents the partial t-test results used to determine the influence of the Management Information System (MIS) on two dependent variables: service quality and job satisfaction. The results show that MIS has a significant effect on both outcomes. First, the influence of MIS on service quality is significant because the calculated t-value ($t = 1.684$) is greater than the critical t-value ($t_{table} = 1.652$). This means that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected, indicating that improvements in MIS contribute to better service quality in Madrasah. These findings are consistent with previous studies, such as [Hamdat, A., et al. \(2024\)](#), which found that a well-implemented MIS enhances service responsiveness, accuracy, and efficiency in educational institutions. Similarly, [Shah, \(2014\)](#) reported that MIS improves administrative service flow and positively affects user satisfaction in schools.

Furthermore, MIS also significantly influences job satisfaction, as indicated by the calculated t-value ($t = 1.969$), which is higher than the critical value (1.652). Thus, H_a is accepted, meaning MIS contributes positively to teacher and staff job satisfaction at Madrasah. This result aligns with earlier research by [Susilo & Susanto, \(2024\)](#), who emphasized that effective MIS reduces workload stress and supports better decision-making, thereby increasing employee satisfaction. Likewise, a study by [Perelman, \(2014\)](#) showed that teachers working with integrated MIS systems tend to feel more supported, organized, and motivated.

d. Coefficient of Determination Test

Test the coefficient of determination (R^2) is used to measure the level of capability of the independent variable model of the management information system (X_1) in explaining the dependent variable, namely service quality (Y_1) job satisfaction (Y_2) by showing the results of the coefficient of determination of Adjusted R Square. If the Adjusted R Square value is closer to one (1), the better the model's ability to explain job satisfaction (Y).

Table 5. Coefficient of Determination Test

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.858 ^a	,736	,726	9,16844	

a. Predictors: (Constant), Management Information System

Table 5 presents the results of the Coefficient of Determination Test, showing an Adjusted R Square value of 0.726. This means that 72.6% of the variation in service quality (Y1) and job satisfaction (Y2) can be explained by the Management Information System (MIS) variable (X1). In other words, MIS contributes strongly to predicting both service quality and job satisfaction in Madrasah. A high Adjusted R Square value such as this indicates that the MIS implemented in the institution plays a major role in shaping the efficiency of services as well as the satisfaction of employees.

These findings are supported by several previous studies. For example, [Shah, \(2014\)](#) found that MIS contributes significantly to improving administrative service quality and enhances the overall effectiveness of school operations. Similarly, services [Osodo & Jemaiyo, \(2015\)](#) concluded that MIS usage has a substantial impact on employee job satisfaction because it simplifies tasks, reduces errors, and supports decision-making. It also reported that MIS implementation accounts for a large proportion of variance in both service delivery and staff performance in educational institutions. Therefore, the results presented in Table 5 align with previous research, confirming that a well-managed MIS system is a strong predictor of improved service quality and higher job satisfaction.

1. The Role of Management Information Systems in Improving Islamic Education Services in Madrasah

The Management Information System (MIS) at Madrasah is designed to support the overall improvement of educational service quality. The MIS facilitates administrative efficiency, provides real-time data to support decision-making, and enhances the school's strategic planning. The institution's vision and mission are reflected in MIS features that promote transparent services, fast data access, and structured reporting systems. Another key advantage is its ability to streamline workflows through the automation of administrative tasks. The MIS also adapts well to technological developments and the institution's evolving needs. Thus, the MIS functions not merely as a supporting tool, but as a reliable system for managing educational services ([Laudon & Laudon, 2021; McLeod & Schell, 2007](#)).

At both operational and strategic levels, the MIS addresses varying information needs with accuracy and relevance. At the operational level, teachers and staff can access attendance, grades, and schedules directly. Meanwhile, at the managerial and strategic levels, the system provides performance reports, trend data, and policy summaries that support comprehensive evaluations. Integration with external institutions such as the Ministry of Religious Affairs strengthens the accuracy and efficiency of data exchange. The implementation of this system also enables effective tracking of student progress both academically and non-academically. Thus, the MIS supports not only administrative functions but also holistic student development, aligning with data-driven management principles ([Boddy, 2017; Stair & Reynolds, 2020](#)).

Evaluations show that the MIS is considered reliable, fast, and user-friendly. Besides reducing administrative burdens through digitization, it increases cost efficiency by reducing the use of physical documents. The system's technical

performance—such as access speed, intuitive navigation, and operational stability—has contributed to improved service quality. School leaders, teachers, and staff report that the system runs smoothly with few technical issues that are easy to resolve. The system's reliability accelerates decision-making, improves time management, and enhances professional performance. This supports the role of MIS, as highlighted by (Laudon & Laudon, 2021), in improving managerial effectiveness and educational services (Alter, 2002; Kavanagh & Johnson, 2017).

2. The Role of Management Information Systems in Job Satisfaction in Madrasah

The implementation of MIS has had a significant impact on job satisfaction at Madrasah. The system ensures smooth operations through efficient two-way communication between users and administrators. Quick responses to technical issues and support via multiple channels reflect a high quality of service. Moreover, the user-friendly interface and intuitive navigation enhance ease of use, making employees feel appreciated and supported in their duties. The availability of help features and training reflects a human-centered approach to MIS management. These aspects collectively contribute to a positive and productive work environment (Kreitner & Kinicki, 2020; Robbins & Judge, 2019).

Employees' trust in the MIS is relatively high, as the system consistently delivers professional and reliable services. The presence of competent technical staff and user training supports effective use of the system. The MIS provides accurate information that can be accessed anytime, which is highly beneficial for decision-making and reporting processes. In addition, physical infrastructure such as internet connectivity, computer devices, and adequate workspace strengthens employees' satisfaction with the work environment. Despite minor technical limitations, the system generally meets users' expectations. The convenience of independently and flexibly accessing information reinforces positive user perceptions (DeLone & McLean, 2003).

Empathy and system reliability are other crucial factors enhancing the MIS's impact on job satisfaction. The system is developed with attention to user experience, usability, and feature suitability. Its ability to deliver accurate data, handle traffic spikes, and maintain operational stability provides employees with a sense of security. The structured and efficient system enables teachers and staff to focus more on their core tasks. This supports job satisfaction as defined by (Kreitner & Kinicki, 2020), who emphasize the alignment between job expectations and actual experiences. Consequently, the MIS serves as a strategic tool for fostering psychological well-being and work productivity (Tams et al., 2020).

3. The Influence of Management Information Systems in Improving Islamic Education Services and Job Satisfaction in Madrasah

The implementation of the Management Information System (MIS) at Madrasah has shown a significant contribution in improving both service quality and employee job satisfaction. Through process automation features, the system helps accelerate administrative tasks, reduce human error, and present accurate, real-time data. Teachers and educational staff benefit from using the system to carry out

learning evaluations, prepare work plans, and monitor student development more systematically. MIS also enables more targeted execution of work programs through comprehensive data analysis. This effectiveness fosters measurable and professional education management. The structured system helps the school align operational performance with its institutional vision and mission. These benefits are in line with the principles of data-driven educational quality management (Feigenbaum, 2018; Crosby, 2020).

In addition to improving work effectiveness, the MIS strengthens collaboration among staff through an integrated data platform and role-based access control. Teachers can directly update student scores, which are then processed by administrative staff and used by school leaders for strategic decision-making. Real-time data access facilitates synchronization between departments and encourages transparency. Internal reflection and evaluation activities are also supported by clear reporting and data visualization features. Documentation shows that collaboration has improved as communication among staff becomes more open and well-directed. This collaborative and efficient work culture is reinforced through the consistent use of MIS in daily activities. These findings align with (Laudon & Laudon, 2021) assertion that modern information systems enhance cross-functional collaboration in organizations.

Data security and information protection are critical aspects of the MIS's effectiveness at Madrasah. The system includes encryption, network segmentation, and automatic backups to both local servers and cloud storage. Real-time monitoring enables early detection of potential threats. Furthermore, statistical analysis confirms the significant influence of MIS on service quality and job satisfaction. Based on the F-test (simultaneous test), the result shows that the calculated F value (Fcount) is 2.679, which is greater than the Ftable value of 2.410, with a significance level of 0.00, which is less than 0.05. This means that Ha is accepted and H0 is rejected, indicating that MIS significantly affects improvements in service quality and job satisfaction. A well-managed system not only supports operational tasks but also enhances employee comfort and productivity overall (Sari, 2025; Holmes, 2020).

Conclusion

Based on research conducted at Madrasah, the use of the Management Information System (MIS) has proven effective in improving the quality of educational Islamic services and job satisfaction. The MIS supports the school's vision by providing accurate data, streamlining administrative processes, automating tasks, and adapting to technological developments. This system also facilitates data-based decision-making and accelerates service processes, which leads to increased productivity among educators. In terms of job satisfaction, the MIS offers easy access, a user-friendly interface, and enhances employee confidence and comfort. Adequate infrastructure and a responsive management team further strengthen the system's performance. Statistical test results show a significant influence of MIS usage on service quality and job satisfaction, as indicated by both the t-test and F-test, with an F-value of $2.679 > F\text{-table value of } 2.410$ and a significance level of $0.00 < 0.05$. Although there are some technical obstacles such as high data traffic, the MIS still demonstrates high reliability and cost-efficiency. Data security is also maintained

through encryption and access control. Overall, the MIS plays an important role in promoting digital transformation and creating a comfortable, effective, and productive work environment at Madrasah.

The findings suggest that Madrasah should continue to develop and strengthen their Management Information Systems (MIS) as a strategic tool to improve both educational service quality and staff job satisfaction. Effective MIS implementation can enhance administrative efficiency, provide accurate and real-time data, and support decision-making, leading to better responsiveness, reliability, empathy, assurance, and tangible services. To maximize these benefits, schools need to invest in infrastructure, provide ongoing training, and promote user adaptability among teachers and staff. Overall, a well-managed and sustainable MIS contributes to a more efficient, effective, and digitally capable educational environment, aligning with the broader vision and mission of Madrasah institutions.

References

Alharbi, H. F., Alzahrani, N. S., Almarwani, A. M., Asiri, S. A., & Alhowaymel, F. M. (2023). Patients' satisfaction with nursing care quality and associated factors: A cross section study. *Nursing Open*, 10(5), 3253-3262. <https://doi.org/10.1002/nop2.1623>

Alter, S. (2002). *Information Systems: The Foundation of E-Business* (4th ed.). Prentice Hall.

Alzaanin, M. J., & Sulaiman, I. F. (2023). The Impact of Management Information Systems (MIS) on Job Performance During Covid 19, Satisfaction Mediator: Case Study International Students In USIM. *'Abqari Journal*, 28(1), 78-90. <https://doi.org/10.33102/abqari.vol28no1.495>

Arifudin. (2021). *Manajemen strategik: Teori dan implementasi*. Pena Persada.

Boddy, D. (2017). *Management: An Introduction* (7th ed.). Pearson Education.

Crosby, P. B. (2020). *Quality Is Free: The Art of Making Quality Certain*. McGraw-Hill Education.

Davis, G. B. (2023). *Kerangka dasar sistem informasi manajemen: Bagian I pengantar*. Pustaka Binaman Pressindo.

DeLone, W. H., & 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. doi:10.1080/07421222.2003.11045748

Efendi, N., (2014). *Membangun sekolah efektif dan unggulan: strategi alternatif memajukan Pendidikan*. Tulungagung: UIN Satu Press.

Feigenbaum, A. V. (2018). *Total Quality Control*. McGraw-Hill.

Hamdat, A., et al. (2024). The impact of management information systems on decision-making efficiency. *Vifada Management and Digital Business*, 1(2), 56-74. <https://jurnal.vifada.id/index.php/mdb/article/view/102>

Handayani, P. W., Hidayanto, A. N., & Ayuningtyas, D. (2020). Evaluation of e-health implementation in Indonesia: A case of health information system. *Telematics and Informatics*, 49, 101361. <https://doi.org/10.1016/j.tele.2020.101361>

Hassan, A. A. (2023). Impact of management information systems on school performance: A case study in developing country context. *International Journal of Education and Development*, 45(2), 112–125. doi:10.25130/tjaes.18.58.2.7

Helmawati. (2015). *Sistem informasi manajemen: Pendidikan Agama Islam*. Rosdakarya.

Holmes, R. W. (2020). *Management Information Systems in Education*. *Education Journal*, 12(3), 113–125. doi:10.9790/7388-04143644

Junaris, I., (2024). Implementasi Sistem Informasi Manajemen (SIM) Bidang Akademik Dalam Meningkatkan Kualitas Layanan Pendidikan. *Educational Leadership: Jurnal Manajemen Pendidikan*, 4(1), 23-33, <https://doi.org/10.24252/edu.v4i1.46921>

Kavanagh, M. J., & Johnson, R. D. (2017). *Human Resource Information Systems: Basics, Applications, and Future Directions* (4th ed.). SAGE Publications.

Kreitner, R., & Kinicki, A. (2020). *Organizational Behavior* (11th ed.). McGraw-Hill Education.

Laudon, K. C., & Laudon, J. P. (2021). *Management Information Systems: Managing the Digital Firm* (17th ed.). Pearson.

Masruroh, M., Nawafilah, N. Q., & Anggraini, E. (2022). The Analysis of Students' School Burnout Level and Academic Achievement on The Science Management Subject. *Tarbiyah : Jurnal Ilmiah Kependidikan*, 11(2), 49–57. <https://doi.org/10.18592/tarbiyah.v11i2.7120>

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

McLeod, R., & Schell, G. P. (2007). *Management Information Systems* (10th ed.). Pearson.

Mu'min, M. B., & Nugraha, M. S. (2024). Challenges and opportunities of management information system (MIS) implementation in islamic education institutions. *As-Sulthan Journal of Education*, 1(2), 209-238. <https://ojssulthan.com/asje/article/view/21>

Mutohar, P.M., (2023). Manajemen Peningkatan Mutu Madrasah Dalam Membentuk Madrasah Efektif di Era Global. *Al-Idaroh: Jurnal Studi Manajemen Pendidikan Islam*, 7(1), 125-143. <https://doi.org/10.54437/alidaroh.v7i1.1249>

Osodo, O. P., & Jemaiyo, B. (2015). Relationship between the use of management information systems and employee job performance: evidence from kenindia assurance company limited. *British Journal of Marketing Studies*, 3(5), 61-70. <https://www.eajournals.org/wp-content/uploads/Relationship-between-the-Use-of-Management-Information-Systems-and-Employee-Job-Performance.pdf>

Perelman, U. (2014). What are the relationships between teachers' engagement with management information systems and their sense of accountability. *Interdisciplinary Journal of E-learning and learning objects*, 10(1), 217-227. <https://doi.org/10.28945/2070>

Prasoj, L. D. (2013). *Sistem informasi manajemen pendidikan*. UNY Press.

Rahimi, R., & Gunlu, E. (2016). Implementing customer relationship management (CRM) in the hotel industry. *International Journal of Contemporary Hospitality Management*, 28(1), 71–93. <https://doi.org/10.1108/IJCHM-01-2014-0015>

Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), 41-49. <https://doi.org/10.1016/j.heliyon.2019.e02690>

Robbins, S. P., & Judge, T. A. (2019). *Organizational Behavior* (18th ed.). Pearson.

Rochaety, E. (2008). *Sistem informasi manajemen pendidikan*. Bumi Aksara.

Sari, N. Z. M. S., Nurdin, R., & Sondary, T. (2025). Study Effectiveness of Management Information Systems and Organizational Culture on Productivity Work Accounting Department Employees. *Ilomata International Journal of Management*, 5(4), 731 - 741. <https://doi.org/10.61194/ijjm.v5i4.1375>

Shah, M. (2014). Impact of management information systems (MIS) on school administration: What the literature says. *Procedia-Social and Behavioral Sciences*, 116, 2799-2804. <https://doi.org/10.1016/j.sbspro.2014.01.659>

Siagian, S. P. (2016). *Sistem informasi manajemen*. Bumi Aksara.

Stair, R., & Reynolds, G. (2020). *Principles of Information Systems* (13th ed.). Cengage Learning.

Suardi, R. (2004). *Sistem manajemen mutu ISO 9000:2000: Penerapannya untuk mencapai TQM*. PPM.

Sulistyorini. (2024). Top Management Responsibilities in Strategic Management of Student Achievement at MTSN 8 Kediri. *Al-Mafazi: Journal of Islamic Education Management*, 2(2): 64-76, <https://ejournal.staimas.ac.id/index.php/mpi/article/view/295>

Suryani, L., Kurhayadi, K., & Susniwati, S. (2023). *Evaluating Service Quality and Motivation in Affecting Employee Performance in Public Sector*. *Jurnal Ilmu Manajemen Advantage*, 7(2), 159-172. <https://doi.org/10.30741/adv.v7i2.1225>

Susilo, B. W., & Susanto, E. (2024). Employing artificial intelligence in management information systems to improve business efficiency. *Journal of Management and Informatics*, 3(2), 212-229. <https://jmi.stekom.ac.id/index.php/jmi/article/view/30>

Sutedjo Dharma, B. (2002). *Perencanaan dan pengembangan sistem informasi*. Andi Offset.

Sunarya, P.A., Asri, M., Azizah, N., & Lim, C. P. (2025). Evaluation of Educational Information Systems for Data and Decision Management: Evaluasi Sistem Informasi Pendidikan untuk Pengelolaan Data dan Keputusan. *Jurnal Mentari Manajemen Pendidikan dan Teknologi Informasi*, 3(2), 118-126. doi: 10.33050/mentari.v3i2.738

Tams, S., Thatcher, J. B., & Grover, V. (2020). Concentration, competence, confidence, and capture: An experimental study of age, interruption-based technostress, and task performance. *Journal of the Association for Information Systems*, 21(6), 1508-1535. <https://doi.org/10.17705/1jais.00511>

Tasif, A. (2015). *Sistem informasi manajemen pendidikan Agama Islam*. PT Remaja Rosdakarya.

Yakub, & Hisbanarto, V. (2014). *Sistem informasi manajemen pendidikan*. Graha Ilmu.

Zheng, Q. U. (2024). Digital readiness and digital competences influence on information management system: Organizational support as Moderator. *Profesional de la información*, 33(4), 23-30. <https://doi.org/10.3145/epi.2024.ene.0408>