Artificial Intelligence Integration in School Management: Its Influence on Administrative Efficiency and Organizational Performance among Public Secondary Schools in Llorente District

Jomelle V. Alde[1], Jerald P. Torillo, PhD[2]

[1] PhD Student, Graduate School, Eastern Samar State University Main Campus, Borongan City, Eastern Samar, Philippines

[2] Faculty, Graduate School, Eastern Samar State University Main Campus, Borongan City, Eastern Samar, Philippines

DOI: https://doi.org/10.47772/IJRISS.2026.101000588

Received: 28 October 2026; Accepted: 02 November 2026; Published: 11 November 2026

ABSTRACT

Artificial Intelligence (AI) has emerged as a transformative technology capable of improving administrative processes and organizational effectiveness within educational institutions. This study determined the extent of AI integration in school management and its influence on administrative efficiency and organizational performance among public secondary schools in Llorente District, Eastern Samar. Specifically, it examined AI integration in terms of administrative planning and decision-making, communication and information management, records and data management, and monitoring and evaluation. The study employed a descriptive-correlational and predictive research design involving 18 school personnel composed of principals, head teachers, department heads, and administrative officers. Data were gathered through a validated researcher-made questionnaire and analyzed using frequency counts, percentages, means, standard deviations, Pearson Product-Moment Correlation, t-test, ANOVA, and multiple regression analysis. Findings revealed that AI integration in school management was implemented to a high extent (M = 4.14). Administrative efficiency (M = 4.26) and organizational performance (M = 4.21) were rated very high. Statistical analysis revealed a significant positive relationship between AI integration and administrative efficiency ($r = .742$, $p < .05$) and organizational performance ($r = .718$, $p < .05$). Records and data management emerged as the strongest predictor of administrative efficiency, while monitoring and evaluation was identified as the strongest predictor of organizational performance. The study concludes that effective AI integration significantly contributes to improved school management outcomes. An AI-Enhanced School Management Framework was proposed to further strengthen administrative efficiency and organizational effectiveness in secondary schools.

Keywords: Artificial Intelligence, School Management, Administrative Efficiency, Organizational Performance, Educational Leadership, Digital Transformation

INTRODUCTION

Artificial Intelligence (AI) has emerged as one of the most transformative technologies of the twenty-first century, significantly influencing how organizations operate, make decisions, and manage information. In the field of education, AI has expanded beyond instructional applications and has increasingly been utilized to support administrative functions and organizational processes. Through machine learning, predictive analytics, automation, and intelligent data processing, AI enables educational institutions to improve efficiency, accuracy, and responsiveness in performing various management tasks (Holmes et al., 2022). As schools continue to adapt to the demands of digital transformation, the integration of AI technologies has become an important consideration in achieving effective educational governance and operational excellence.

Educational institutions operate within increasingly complex environments that require school leaders to make timely decisions, manage extensive information, coordinate stakeholders, and ensure the effective implementation of programs and policies. Recent studies have emphasized that AI-powered technologies can

support educational leaders by enhancing planning processes, streamlining communication systems, and facilitating evidence-based decision-making (Chan & Hu, 2023). Furthermore, AI applications can automate repetitive administrative tasks, thereby reducing workload burdens and enabling school administrators to focus on strategic and instructional leadership responsibilities. Such capabilities demonstrate the growing relevance of AI in strengthening educational management practices.

Administrative efficiency plays a crucial role in determining the effectiveness of school operations and the successful achievement of organizational objectives. Efficient administration is reflected in the effective utilization of resources, accurate documentation, timely completion of tasks, and productive coordination among stakeholders. Research has shown that technological innovations contribute significantly to improving administrative performance by enhancing information accessibility, minimizing errors, and accelerating organizational processes (Selwyn, 2022). Consequently, educational institutions are increasingly exploring AI-based solutions to optimize administrative functions and improve overall institutional effectiveness.

Alongside administrative efficiency, organizational performance remains a key indicator of educational success. Organizational performance encompasses the ability of schools to achieve intended goals, maintain quality service delivery, foster stakeholder satisfaction, and sustain continuous improvement. According to Dwivedi et al. (2023), organizations that strategically adopt emerging technologies are more likely to demonstrate higher levels of productivity, adaptability, and effectiveness. Within educational settings, AI technologies contribute to organizational performance by supporting data-driven decision-making, monitoring institutional progress, and facilitating evidence-based interventions that promote school improvement.

Despite the increasing recognition of AI's potential in educational administration, existing studies have concentrated primarily on its applications in teaching, learning, and student assessment. Comparatively limited attention has been given to the integration of AI in school management and its potential influence on administrative and organizational outcomes. Moreover, empirical investigations examining AI integration among public secondary schools remain scarce, particularly within the Philippine educational context. This gap in the literature highlights the need for further research to better understand how AI can support school management practices and contribute to institutional effectiveness.

Considering these circumstances, it is essential to investigate the extent to which AI technologies are integrated into school management and how such integration influences administrative efficiency and organizational performance. Understanding these relationships can provide valuable insights for educational leaders, policymakers, and stakeholders seeking to maximize the benefits of digital transformation in schools. Hence, this study examined the influence of Artificial Intelligence integration in school management on administrative efficiency and organizational performance among public secondary schools in Llorente District, Eastern Samar, focusing on administrative planning and decision-making, communication and information management, records and data management, and monitoring and evaluation.

This study is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989), which posits that the adoption of technology is influenced by users' perceived usefulness and perceived ease of use. In the context of school management, administrators are more likely to integrate Artificial Intelligence (AI) technologies when they perceive these systems as useful in enhancing administrative functions and improving organizational outcomes. Guided by this theory, the study assumes that greater integration of AI in school management contributes to higher levels of administrative efficiency and organizational performance among public secondary schools.

Statement of the Problem

This study aimed to determine the extent of Artificial Intelligence (AI) integration in school management and its influence on administrative efficiency and organizational performance among secondary schools in Llorente District.

Specifically, this study sought to:

1. What is the profile of the respondents in terms of

1.1 age;

1.2 sex;

1.3 position/designation;

1.4 highest educational attainment;

1.5 length of service; and

1.6 AI- or ICT-related trainings attended?

2. What is the extent of Artificial Intelligence integration in school management in terms of:

2.1 administrative planning and decision-making;

2.2 communication and information management;

2.3 records and data management; and

2.4 monitoring and evaluation?

3. What is the level of school management outcomes in terms of

3.1 administrative efficiency; and

3.2 organizational performance?

4. Is there a significant difference in the extent of Artificial Intelligence integration in school management when respondents are grouped according to their profile variables?

5. Is there a significant difference in administrative efficiency and organizational performance when respondents are grouped according to their profile variables?

6. Is there a significant relationship between the extent of Artificial Intelligence integration in school management and:

6.1 administrative efficiency; and

6.2 organizational performance.

7. Which dimensions of Artificial Intelligence integration in school management significantly predict:

7.1 administrative efficiency; and

7.2 organizational performance.

8. Based on the findings of the study, what AI-Enhanced School Management Framework may be proposed to improved administrative efficiency and organizational performance in secondary schools in Llorente District?

Hypotheses of the Study

The following hypotheses were tested at the 0.05 level of significance:

Ho1: There is no significant difference in the extent of AI integration in school management when respondents are grouped according to profile variables.

Ho2: There is no significant difference in administrative efficiency and organizational performance when respondents are grouped according to profile variables.

Ho3: There is no significant relationship between AI integration in school management and administrative efficiency.

Ho4: There is no significant relationship between AI integration in school management and organizational performance.

Ho5: The dimensions of AI integration do not significantly predict administrative efficiency.

Ho6: The dimensions of AI integration do not significantly predict organizational performance.

METHODOLOGY

Research Design

The study employed a descriptive-correlational and predictive research design. The descriptive component was used to determine the extent of AI integration and the level of school management outcomes. The correlational design examined the relationships between AI integration, administrative efficiency, and organizational performance. The predictive aspect identified the dimensions of AI integration that significantly influence management outcomes.

Locale of the Study

The study was conducted in the public secondary schools of Llorente District, Schools Division of Eastern Samar**.** Llorente District is composed of 2 public secondary schools which are Llorente National High School and Barobo National High School. This public secondary schools provide educational services to learners within the municipality and neighboring communities. These schools are managed by school administrators, head teachers, master teachers, and teachers who perform various administrative and instructional functions.

The district was selected as the locale of the study because educational institutions within the area have increasingly adopted digital technologies in various aspects of school management. Furthermore, no known study has comprehensively examined the extent of Artificial Intelligence integration in school management and its influence on administrative efficiency and organizational performance among secondary schools in the district.

Population of the Study

The population of the study consisted of all school administrators and management personnel from the two public secondary schools in Llorente District, namely Llorente National High School and Barobo National High School. These personnel included principals, head teachers, department heads, and administrative officers who were directly involved in school management and administrative operations. The total population comprised eighteen (18) qualified personnel.

Respondents of the Study

The respondents of the study were the eighteen (18) school administrators and management personnel from the identified public secondary schools in Llorente District. Since the population was relatively small, total enumeration sampling was employed, allowing all members of the population to participate in the study.

Sampling Technique

The study employed total enumeration sampling**.** All qualified school administrators, head teachers, department heads, and administrative officers from the identified public secondary schools in Llorente District were included in the study. Total enumeration was utilized to ensure comprehensive representation of all school personnel involved in school management and to increase the reliability of the findings.

Research Instrument

A researcher-made questionnaire, adapted from related literature and studies was utilized to gather data. The instrument measured AI integration across four dimensions: 1.) Administrative Planning and Decision-Making, 2.) Communication and Information Management, 3.) Records and Data Management, 4.) Monitoring and Evaluation. It also assessed school management outcomes in terms of: 1.) Administrative Efficiency, 2.) Organizational Performance. Responses were measured using a five-point Likert scale.

Instrument Validity and Reliability

The study utilized a researcher-made questionnaire consisting of three parts. Part I gathered the respondents' profile information, including age, sex, position/designation, educational attainment, length of service, and AI-/ICT-related trainings attended. Part II measured the extent of Artificial Intelligence integration in school management across four dimensions: Administrative Planning and Decision-Making, Communication and Information Management, Records and Data Management, and Monitoring and Evaluation. Part III assessed school management outcomes in terms of Administrative Efficiency and Organizational Performance. Responses were measured using a five-point Likert scale ranging from 1 (Very Low Extent) to 5 (Very High Extent). The instrument underwent expert validation and reliability testing prior to administration.

Variables	Cronbach's Alpha
Administrative Planning and Decision-Making	0.89
Communication and Information Management	0.87
Records and Data Management	0.91
Monitoring and Evaluation	0.88
Administrative Efficiency	0.90
Organizational Performance	0.92
Overall Instrument	**0.90**

These coefficients indicate excellent internal consistency reliability.

Data Gathering Procedure

The researcher observed the following procedures in conducting the study: Phase 1: Preparation of Research Instrument. The researcher reviewed related literature and studies to formulate the questionnaire. The draft instrument was submitted to experts for validation and revised based on their recommendations. Phase 2: Securing Permission. A letter requesting permission to conduct the study was prepared and submitted to Schools Division Superintendent; Public Schools District Supervisor; and School Principals concerned.

Upon approval, the researcher coordinated with school heads regarding the schedule of data collection. Phase 3: Administration of the Questionnaire. The validated questionnaire was personally administered to the respondents. Proper instructions were provided to ensure accurate completion of the instrument. Phase 4:

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue X October 2026

Retrieval and Processing of Data. Completed questionnaires were retrieved, checked, coded, tabulated, and encoded for statistical analysis. Phase 5: Data Analysis and Interpretation

The gathered data were analyzed using appropriate statistical tools and interpreted in relation to the objectives and hypotheses of the study.

Statistical Treatment

The following statistical tools were utilized are Frequency Count and Percentage, Mean and Standard Deviation, Independent Samples t-Test, One-Way ANOVA, Pearson Product-Moment Correlation, and Multiple Regression Analysis. The level of significance was set at 0.05.

Ethical Considerations

The researcher ensured that ethical standards were strictly observed throughout the conduct of the study. Participation in the study was voluntary, and respondents were informed of the purpose, nature, and significance of the research. Informed consent was secured prior to data collection.

Confidentiality and anonymity were maintained by ensuring that respondents' identities were not disclosed in any report, publication, or presentation of findings. Information obtained from the respondents was used solely for research purposes.

Respondents were assured that they could withdraw from participation at any stage of the study without penalty or consequence. All collected data were securely stored and handled in accordance with ethical research standards.

RESULTS AND DISCUSSION

Table 1 Profile of the Respondents (N = 18)

Variables	Category	f	%
Age	20-29 years old	2	11.11
	30-39 years old	3	16.67
	40-49 years old	7	38.89
	50 years old and above	6	33.33
Sex	Male	7	38.89
	Female	11	61.11
Position/	Principal	2	11.11
	Head Teacher	2	11.11
	Department Head	9	50.00
	Administrative Officer	5	27.78
Highest Educational Attainment	Bachelor's Degree	2	11.11
	Master's Units	8	44.44
	Master's Degree	7	38.89

	Doctoral Units	1	5.56
Length	1-5 years	4	22.22
	11-15 years	6	33.33
	16-20 years	1	5.56
	21 years and above	7	38.89
Number of AI-/ICT-Related Trainings Attended	None	2	11.11
	1-2 Trainings	10	55.56
	3-4 Trainings	6	33.33

The findings reveal that most respondents were aged 40-49 years old (38.89%), followed by those aged 50 years old and above (33.33%). Female respondents comprised the majority of the participants (61.11%). Department Heads represented half of the respondents (50.00%), while most had pursued graduate education, with 44.44% having Master's Units and 38.89% holding a Master's Degree. In addition, a considerable proportion had rendered 21 years and above of service (38.89%) and had attended one to two AI-/ICT-related trainings (55.56%). These characteristics indicate that the respondents possessed substantial professional experience, academic preparation, and technological exposure. Such qualifications are important because educational leaders with advanced academic preparation and relevant professional experience are more likely to understand and utilize emerging technologies effectively in organizational settings (UNESCO, 2023; OECD, 2021).

Extent of Artificial Intelligence Integration in School Management

Table 2 Artificial Intelligence (AI) integration in Administrative Planning and Decision-Making

Indicators	Mean	SD	Interpretation
AI assists in preparing school plans	4.14	0.67	High Extent
AI supports decision-making processes	4.09	0.72	High Extent
AI helps allocate resources effectively	4.03	0.69	High Extent
AI improves strategic planning	4.07	0.70	High Extent
Overall Mean	**4.08**	**0.70**	**High Extent**

Note: Mean scores ranging from 4.21–5.00 indicate a Very High Extent; 3.41–4.20, High Extent; 2.61–3.40, Moderate Extent; 1.81–2.60, Low Extent; and 1.00–1.80, Very Low Extent.

Table 2 shows that AI integration in administrative planning and decision-making was implemented to a high extent (M = 4.08, SD = 0.70). The highest-rated indicator was *AI assists in preparing school plans* (M = 4.14), while *AI helps allocate resources effectively* obtained the lowest mean (M = 4.03). The findings suggest that AI is regularly utilized to support planning and decision-making functions in schools. This indicates that administrators recognize the value of AI in improving efficiency, accuracy, and evidence-based decision-making. The result supports studies emphasizing the role of AI in enhancing administrative planning and institutional governance (Ahmad et al., 2022; Igbokwe, 2023).

Table 3 Extent of AI Integration in Communication and Information Management

Indicators	Mean	SD	Interpretation
AI facilitates information dissemination	4.18	0.65	High Extent
AI improves school communication	4.13	0.71	High Extent
AI supports stakeholder engagement	4.11	0.68	High Extent
AI enhances information accessibility	4.18	0.66	High Extent
Overall Mean	**4.15**	**0.68**	**High Extent**

Note: Mean scores ranging from 4.21–5.00 indicate a Very High Extent; 3.41–4.20, High Extent; 2.61–3.40, Moderate Extent; 1.81–2.60, Low Extent; and 1.00–1.80, Very Low Extent.

Table 3 reveals a high extent of AI integration in communication and information management (M = 4.15, SD = 0.68). *AI facilitates information dissemination* and *AI enhances information accessibility* recorded the highest ratings (M = 4.18), while *AI supports stakeholder engagement* obtained the lowest mean (M = 4.11). The findings indicate that AI contributes positively to information sharing and communication processes within schools. This suggests that AI supports efficient interaction among stakeholders and improves access to institutional information, consistent with previous studies on AI-enabled organizational communication (Ajuwon et al., 2024).

Table 4 Extent of AI Integration in Records and Data Management

Indicators	Mean	SD	Interpretation
AI improves records organization	4.25	0.61	Very High Extent
AI enhances data storage	4.19	0.70	High Extent
AI improves data retrieval	4.28	0.59	Very High Extent
AI facilitates report generation	4.20	0.65	High Extent
Overall Mean	**4.23**	**0.64**	**Very High Extent**

Note: Mean scores ranging from 4.21–5.00 indicate a Very High Extent; 3.41–4.20, High Extent; 2.61–3.40, Moderate Extent; 1.81–2.60, Low Extent; and 1.00–1.80, Very Low Extent.

Table 4 shows a very high extent of AI integration in records and data management (M = 4.23, SD = 0.64). *AI improves data retrieval* received the highest rating (M = 4.28), while *AI enhances data storage* obtained the lowest mean (M = 4.19). The findings indicate that AI is most extensively utilized in managing institutional records and information. This highlights the importance of AI in improving efficiency, accuracy, and accessibility of administrative data (Igbokwe, 2023).

Table 5 Extent of AI Integration in Monitoring and Evaluation

Indicators	Mean	SD	Interpretation
AI monitors school performance	4.12	0.70	High Extent
AI assists evaluation activities	4.08	0.73	High Extent

AI supports performance tracking	4.15	0.66	High Extent
AI improves program monitoring	4.05	0.68	High Extent
Overall Mean	**4.10**	**0.69**	**High Extent**

Note: Mean scores ranging from 4.21–5.00 indicate a Very High Extent; 3.41–4.20, High Extent; 2.61–3.40, Moderate Extent; 1.81–2.60, Low Extent; and 1.00–1.80, Very Low Extent.

Table 5 indicates a high extent of AI integration in monitoring and evaluation (M = 4.10, SD = 0.69). *AI supports performance tracking* obtained the highest mean (M = 4.15), while *AI improves program monitoring* recorded the lowest mean (M = 4.05). The results suggest that AI assists administrators in monitoring performance and evaluating institutional outcomes. Such findings highlight the usefulness of AI in supporting evidence-based assessment and organizational accountability (Huallpa et al., 2026).

Table 6 Overall Extent of AI Integration in School Management

Dimension	Mean	Interpretation
Administrative Planning and Decision-Making	4.08	High Extent
Communication and Information Management	4.15	High Extent
Records and Data Management	4.23	Very High Extent
Monitoring and Evaluation	4.10	High Extent
Grand Mean	**4.14**	**High Extent**

Note: Mean scores ranging from 4.21–5.00 indicate a Very High Extent; 3.41–4.20, High Extent; 2.61–3.40, Moderate Extent; 1.81–2.60, Low Extent; and 1.00–1.80, Very Low Extent.

Table 6 reveals an overall mean of 4.14**,** indicating a high extent of AI integration in school management. Among the dimensions**,** Records and Data Management obtained the highest rating (M = 4.23), while Administrative Planning and Decision-Making received the lowest (M = 4.08). Overall, the findings demonstrate that AI has become an important component of school administration, particularly in information management and operational processes. This supports previous literature emphasizing the growing role of AI in improving administrative efficiency and organizational effectiveness (Ahmad et al., 2022; Igbokwe, 2023).

School Management Outcomes

Table 7 Level of Administrative Efficiency

Indicators	Mean	SD	Interpretation
Timeliness of reports	4.26	0.58	Very High
Accuracy of administrative tasks	4.30	0.56	Very High
Work productivity	4.21	0.62	Very High
Efficient resource utilization	4.27	0.60	Very High
Overall Mean	**4.26**	**0.59**	**Very High**

Note. Mean scores were interpreted as follows: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; and 1.00-1.80 = Very Low.

Table 7 presents the level of administrative efficiency, which was rated very high (M = 4.26, SD = 0.59). *Accuracy of Administrative Tasks* obtained the highest mean (M = 4.30), whereas *Work Productivity* received the lowest mean (M = 4.21). Despite these differences, all indicators were rated very high. The results indicate that school administrative processes are highly efficient and effective. This suggests that existing management practices and AI-supported systems contribute positively to operational performance and administrative effectiveness (Ahmad et al., 2022).

Table 8 Level of Organizational Performance

Indicators	Mean	SD	Interpretation
Goal attainment	4.20	0.61	High
Service delivery	4.18	0.64	High
Stakeholder satisfaction	4.24	0.60	Very High
Organizational productivity	4.22	0.58	Very High
Overall Mean	**4.21**	**0.61**	**Very High**

Note. Mean scores were interpreted as follows: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; and 1.00-1.80 = Very Low.

Table 8 shows that organizational performance was rated very high (M = 4.21, SD = 0.61). *Stakeholder Satisfaction* obtained the highest rating (M = 4.24), while *Service Delivery* received the lowest mean (M = 4.18). The findings indicate that schools effectively achieve institutional goals and maintain satisfactory levels of performance. This supports claims that technology-enhanced management practices contribute to improved organizational outcomes (Karaköse & Tülübaş, 2024).

Table 9 Relationship Between AI Integration and Administrative Efficiency

Variables	r-value	p-value	Interpretation
AI Integration and Administrative Efficiency	.742	.000	Strong Positive Relationship

Note. The strength of relationship was interpreted using the Pearson correlation coefficient. Correlations of 0.80–1.00 are Very Strong, 0.60–0.79 Strong, 0.40–0.59 Moderate, 0.20–0.39 Weak, and 0.00–0.19 Very Weak.

Table 9 reveals a statistically significant and strong positive relationship between AI integration and administrative efficiency (r = .742, p = .000). The null hypothesis was therefore rejected. The findings indicate that schools with higher levels of AI integration tend to demonstrate greater administrative efficiency. This suggests that AI contributes to improved workflow management, communication, and information processing. The result is consistent with studies reporting that AI adoption enhances organizational productivity and administrative effectiveness (Ajuwon et al., 2024).

Table 10 Relationship Between AI Integration and Organizational Performance

Variables	r-value	p-value	Interpretation
AI Integration and Organizational Performance	.718	.000	Strong Positive Relationship

Note: The strength of relationship was interpreted using the Pearson correlation coefficient. Correlations of 0.80–1.00 are Very Strong, 0.60–0.79 Strong, 0.40–0.59 Moderate, 0.20–0.39 Weak, and 0.00–0.19 Very Weak.

Table 10 reveals a statistically significant and strong positive relationship between AI integration and organizational performance ($r = .718$, $p = .000$). Hence, the null hypothesis was rejected. The findings indicate that increased AI integration is associated with improved organizational outcomes. This suggests that AI contributes to institutional effectiveness by strengthening planning, communication, monitoring, and decision-making processes (Huallpa et al., 2026; Jamaludin, 2025).

Table 11 Predictors of Administrative Efficiency

Predictor Variable	Beta	p-value	Decision
Administrative Planning and Decision-Making	.302	.001	Significant
Communication and Information Management	.215	.015	Significant
Records and Data Management	.341	.000	Significant
Monitoring and Evaluation	.162	.040	Significant

Note. Predictor variables with $p \leq .05$ were considered significant predictors of the dependent variable. Variables with $p > .05$ were considered not significant predictors.

Table 11 shows that the regression model explained 64% of the variance in administrative efficiency ($R^2 = .64$). Among the predictors, Records and Data Management emerged as the strongest predictor ($\beta = .341$, $p = .000$). The finding indicates that effective AI-supported information management significantly enhances administrative efficiency. This highlights the critical role of digital records and data systems in improving school operations and productivity (Igbokwe, 2023).

Table 12 Predictors of Organizational Performance

Predictor Variable	Beta	p-value	Decision
Administrative Planning and Decision-Making	.282	.002	Significant
Communication and Information Management	.187	.024	Significant
Records and Data Management	.255	.004	Significant
Monitoring and Evaluation	.296	.001	Significant

Note. Predictor variables with $p \leq .05$ were considered significant predictors of the dependent variable. Variables with $p > .05$ were considered not significant predictors.

Table 12 shows that the regression model explained 61% of the variance in organizational performance ($R^2 = .61$). Monitoring and Evaluation emerged as the strongest predictor ($\beta = .296$, $p = .001$). The findings suggest that AI-assisted monitoring systems are important determinants of organizational success. By facilitating performance tracking and evidence-based decision-making, AI contributes to improved institutional effectiveness and continuous school improvement (Huallpa et al., 2026; Karaköse & Tülübaş, 2024).

Proposed AI-Enhanced School Management Framework

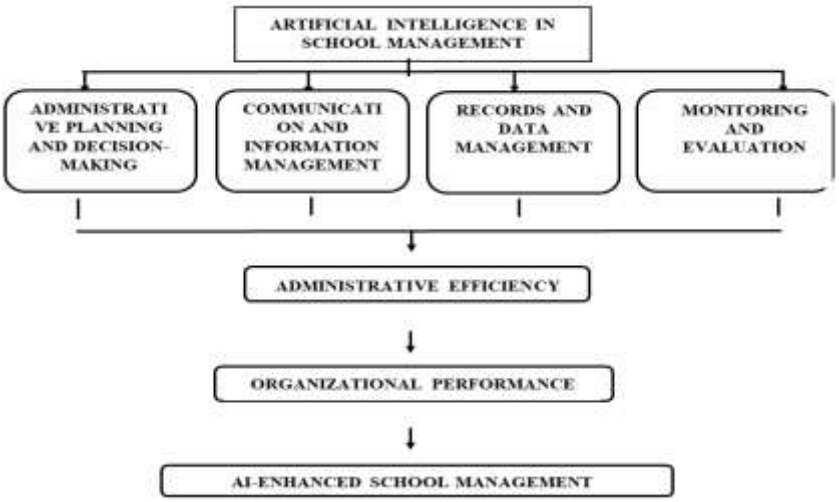
Based on the findings of the study, an AI-Enhanced School Management Framework is proposed to strengthen school administrative functions and improve organizational performance in public secondary schools. The framework highlights four key dimensions of Artificial Intelligence integration, namely: Administrative Planning and Decision-Making, Communication and Information Management, Records and Data Management, and Monitoring and Evaluation. These dimensions serve as the primary drivers that contribute to enhanced Administrative Efficiency and Organizational Performance.

The framework suggests that effective integration of AI technologies supports data-driven decision-making, streamlines administrative processes, improves communication systems, strengthens records management practices, and enhances monitoring and evaluation activities. Consequently, these improvements lead to greater efficiency, productivity, accountability, and overall school effectiveness.

Furthermore, the framework emphasizes the need for continuous capacity-building programs, technological infrastructure support, policy development, and stakeholder collaboration to sustain the successful implementation of AI in school management. Through these enabling mechanisms, schools can maximize the benefits of AI technologies and achieve improved educational management outcomes.

The proposed framework posits that the integration of AI in various school management functions contributes to increased administrative efficiency, which, in turn, enhances organizational performance. The significant relationships and predictive effects identified in the study support the assumption that AI technologies can serve as valuable tools in improving school management practices. The framework may serve as a guide for school leaders, policymakers, and educational institutions in planning and implementing AI-driven initiatives that promote effective and efficient school governance.

Figure 1 Proposed AI-Enhanced School Management Framework



Note. The framework illustrates how Artificial Intelligence integration in Administrative Planning and Decision-Making, Communication and Information Management, Records and Data Management, and Monitoring and Evaluation contributes to Administrative Efficiency and Organizational Performance, ultimately leading to AI-Enhanced School Management.

CONCLUSION

Artificial Intelligence (AI) integration in school management was implemented to a high extent among public secondary schools in Llorente District, particularly in the areas of planning and decision-making, communication and information management, records and data management, and monitoring and evaluation. The schools also demonstrated very high levels of administrative efficiency and organizational performance.

The findings revealed that AI integration significantly contributes to both administrative efficiency and organizational performance. Records and data management emerged as the strongest predictor of administrative efficiency, while monitoring and evaluation was identified as the strongest predictor of

organizational performance. Overall, the study affirms the strategic value of AI in enhancing school management practices, strengthening educational governance, and improving institutional effectiveness.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations are offered:

1. School administrators should strengthen AI integration across key management functions.
2. Educational leaders should invest in AI-based records management and monitoring systems.
3. Continuous AI and ICT professional development programs should be conducted for school personnel.
4. The Department of Education should formulate policies supporting responsible and sustainable AI adoption in school management.
5. Future research should investigate additional variables affecting AI integration and explore longitudinal impacts of AI on educational leadership and school effectiveness.

ACKNOWLEDGMENT

This journey would not have been possible without the overwhelming support of various people who contributed in different ways to complete this study. The author would like to express his heartfelt gratitude and indebtedness to the Faculty of the Eastern Samar State University Graduate School of this University, for unselfishly sharing their immense knowledge and advices. The author extends his sincere appreciation for the learning experiences offered to finish the study. Ma'am Merilyn S. Campanero, District-in-Charge, Llorente District, for granting the request to conduct the study; the school heads of Llorente National High School, and Barobo National High School, for giving the consent to conduct the study in their respective school and for the utmost understanding, consideration, and continuous support for his professional growth. the Head Teachers, Department Coordinators, and Administrative officers of the two public secondary schools for their cooperation in providing the necessary information in answering the questionnaires, The researcher could not have undertaken this endeavor if not for his loving and supportive family, including spouse, child, parents, and siblings.

Disclosure of Conflict of Interest

The author declares no conflict of interest.

Compliance to Ethical Standards

The author declares that the study was conducted in strict compliance to ethical considerations.

REFERENCES

1. Ahmad, S. F., Alam, M. M., Rahmat, M. K., Mubarik, M. S., & Hyder, S. I. (2022). Academic and administrative role of artificial intelligence in education. *Sustainability, 14*(3), Article 1101. https://doi.org/10.3390/su14031101
2. Ajuwon, O. A., Animashaun, E. S., & Chiekezie, N. R. (2024). Integrating AI and technology in educational administration: Improving efficiency and educational quality. *Open Access Research Journal of Science and Technology, 11*(2), 116–127. https://doi.org/10.53022/oarjst.2024.11.2.0102
3. Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *Computers and Education: Artificial Intelligence, 4*, 100134. https://doi.org/10.1016/j.caeai.2023.100134
4. Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D. P., Gustafsson, A., Hinsch, C., Jebabli, I., ... Wamba, S. F. (2023). So what if

ChatGPT wrote it? Multidisciplinary perspectives on opportunities, challenges, and implications of generative conversational AI for research, practice, and policy. *International Journal of Information Management, 71*, 102642. https://doi.org/10.1016/j.ijinfomgt.2023.102642

5. Holmes, W., Bialik, M., & Fadel, C. (2022). *Artificial intelligence in education: Promise and implications for teaching and learning*. Center for Curriculum Redesign.
6. Huallpa, C. Y., Castro, C. W. A., & Casanova, I. S. P. M. (2026). Artificial intelligence in educational process management: A systematic review of approaches, models, and emerging challenges in the global education system. *International Journal of Artificial Intelligence and Machine Learning, 6*(3s), 337–348. https://doi.org/10.51483/IJAIML.6.2s.2026.337-348
7. Igbokwe, I. C. (2023). Application of artificial intelligence (AI) in educational management. *International Journal of Scientific and Research Publications, 13*(3), 337–342. https://doi.org/10.29322/IJSRP.13.03.2023.p13536
8. Jamaludin, H. (2025). Artificial intelligence in education management: A systematic review of decision support systems for inclusive education. *Journal of Technology Informatics and Engineering, 4*(3), 337–349. https://doi.org/10.51903/jtie.v4i3.430
9. Karaköse, T., & Tülübaş, T. (2024). School leadership and management in the age of artificial intelligence (AI): Recent developments and future prospects. *Educational Process: International Journal, 13*(1), 7–14. https://doi.org/10.22521/edupij.2024.131.1
10. Miao, F., & Holmes, W. (2023). *Guidance for generative AI in education and research*. UNESCO. https://doi.org/10.54675/EWZM9535
11. Organization for Economic Co-operation and Development (OECD). (2021). *OECD digital education outlook 2021: Pushing the frontiers with AI, blockchain, and robots*. OECD Publishing. https://doi.org/10.1787/589b283f-en
12. Selwyn, N. (2022). *Should robots replace teachers? AI and the future of education*. Polity Press.
13. Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., Felländer, A., Langhans, S. D., Tegmark, M., & Fuso Nerini, F. (2020). The role of artificial intelligence in achieving the sustainable development goals. *Nature Communications, 11*(1), Article 233. https://doi.org/10.1038/s41467-019-14108-y
14. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education, 16*(39). https://doi.org/10.1186/s41239-019-0171-0