

Organizational Readiness, Administrative Process Requirements, and Privacy Measures for the Centralized Digital Profile System

Kristoffer Jul R. Salomon¹, Grace Anne A. Pocson¹, Ivy Niezel M. Araneta¹, Carmina J. Alboroto¹,
Katrina B. Ora¹

Graduate School, Northwest Samar State University, Calbayog City, Samar, Philippines

Publication history: Received: April 29, 2026; Revised: May 1, 2026; Accepted: May 5, 2026

Email of Corresponding Authors: kjrsalomon@gmail.com

Abstract

This study determined the level of organizational readiness, administrative process requirements, and privacy measures for the implementation of a Centralized Digital Profile System at St. Jude Thaddeus International School, Dili, Timor-Leste. It also examined the relationships between the profile of the respondent groups and their perceptions of organizational readiness, administrative process requirements, and privacy measures, as well as the relationship among the three major study variables. The study employed a descriptive-correlational research design with 98 respondents composed of 5 key officials, 68 teachers, and 25 staff. Data were gathered using a researcher-developed and validated questionnaire that obtained an overall Cronbach's alpha of 0.90, interpreted as excellent reliability. The data were analyzed using frequency, percentage, mean, standard deviation, Mann-Whitney U test, Kruskal-Wallis H test, and Spearman rho correlation. Findings revealed that organizational readiness was rated high, administrative process requirements were rated high, and privacy measures were implemented to a great extent. Significant relationships were found between selected profile variables and the respondents' perceptions of organizational readiness, administrative process requirements, and privacy measures, particularly in terms of age, educational attainment, and position, while sex showed no significant relationship. Significant relationships were also established among organizational readiness, administrative process requirements, and privacy measures. The study concludes that successful implementation of the Centralized Digital Profile System depends on the integration of institutional preparedness, structured administrative processes, and strong privacy safeguards. It recommends strengthening staff participation, financial preparedness, workflow automation, data protection policies, access controls, and continuous cybersecurity training. A strategic implementation plan was proposed to support effective, secure, and sustainable system adoption.

Keywords: Organizational Readiness, Administrative Process Requirements, Privacy Measures, Centralized Digital Profile System, Educational Institution

1. Introduction

Educational institutions increasingly operate in environments that require efficiency, accountability, responsiveness, and secure information management. As schools adapt to digital transformation, centralized digital systems have become important tools for improving administrative operations, managing institutional records, and supporting evidence-based decision-making. The use of digital technologies in school administration helps reduce manual processes, improve data accessibility, minimize duplication of records, and promote faster delivery of institutional services.

However, the successful implementation of digital systems depends not only on the availability of technology. It also requires organizational readiness, well-defined administrative processes, and strong privacy measures. Organizational readiness refers to the institution's capacity to adopt and sustain change through leadership support, staff capability, resource preparedness, and openness to innovation. Administrative process requirements refer to the procedures, workflows, documentation standards, reporting mechanisms, and data management practices needed for the effective operation of a centralized system. Privacy measures refer to the safeguards used to protect sensitive institutional and student information through data protection policies, access control, backup systems, and cybersecurity awareness.

At St. Jude Thaddeus International School, the need for a Centralized Digital Profile System is connected to challenges in student data management, fragmented records, limited process integration, and the need for formalized privacy mechanisms. These concerns reflect the broader need for educational institutions to ensure that digital transformation is supported by institutional preparedness, operational alignment, and responsible data protection practices.

This study examined the level of organizational readiness, administrative process requirements, and privacy measures for the Centralized Digital Profile System. It also determined whether the respondents' profile variables were significantly related to their perceptions of these study variables and whether the three major variables were significantly related to one another. The findings served as the basis for a proposed strategic implementation plan for the effective, secure, and sustainable adoption of the system.

2. Material and methods

2.1 Research Design

The study used a descriptive-correlational research design. The descriptive component was used to determine the profile of the respondents and assess the level of organizational readiness, administrative process requirements, and privacy measures for the implementation of the Centralized Digital Profile System. The correlational component was used to determine the significant relationships between selected profile variables and the respondents' perceptions, as well as the relationships among organizational readiness, administrative process requirements, and privacy measures.

This design was appropriate because the study aimed to describe existing institutional conditions and examine relationships among variables without manipulating them. Through this design, the study was able to provide a data-based foundation for the proposed strategic implementation plan.

2.2 Locale of the Study

The study was conducted at St. Jude Thaddeus International School in Díli, Timor-Leste. The institution was selected because it is engaged in school administrative operations that require accurate student data management, efficient record keeping, structured workflows, and secure handling of information.

2.3 Respondents of the Study

The respondents of the study were key officials, teachers, and staff of St. Jude Thaddeus International School. These groups were selected because they represent major institutional roles involved in leadership, instruction, administrative work, data management, and support services. Their perceptions were important in assessing the readiness of the institution for the implementation of the Centralized Digital Profile System.

2.4 Sample and Sampling Procedure

A total of 98 respondents participated in the study. The respondents consisted of 5 key officials, 68 teachers, and 25 staff. Complete enumeration was used for key officials and staff due to their relatively small number and their direct involvement in governance and administrative operations. Stratified random sampling was used for teachers to ensure representation across teaching groups or assignments.

The distribution of respondents was as follows: key officials composed 5.10 percent of the sample, teachers composed 69.39 percent, and staff composed 25.51 percent. This distribution allowed the study to capture perspectives from leadership, instructional, and operational groups.

2.5 Research Instrument

The study used a structured questionnaire. The instrument gathered data on the respondents' profile and their assessment of strategic human resource practices and leadership development effectiveness. Strategic human resource practices were measured in terms of leadership development and training, digital skills, recruitment and staff retention, culture and change management, and performance management. Leadership development effectiveness was measured in terms of strategy alignment, agility, transparency, engagement, and service delivery. The questionnaire was pilot-tested and obtained a Cronbach's alpha of 0.983, interpreted as excellent reliability.

2.6 Data Gathering Procedure

The researchers secured permission from the Graduate School and the concerned institutional authorities before conducting the study. After approval, coordination was made with designated school personnel for the distribution of the questionnaire. The survey was administered through appropriate channels, and respondents were given clear instructions on how to complete the instrument.

The data collection process was conducted over a period of approximately two to three weeks. Follow-up reminders were given to encourage participation and improve the response rate. The researchers monitored the completion of questionnaires and checked the responses for completeness and consistency before encoding and analysis.

2.7 Data Analysis Techniques

The data were analyzed using descriptive and inferential statistical tools. Frequency and percentage were used to describe the respondents' profile. Mean, weighted mean, and standard deviation were used to determine the level of organizational readiness, administrative process requirements, and privacy measures. The Shapiro-Wilk test was used to assess normality. Since the statistical treatment involved profile-based comparisons and relationship testing, non-parametric tools were used. Spearman rho was used for age and relationship analysis, Mann-Whitney U test was used for two-group comparison such as sex, and Kruskal-Wallis H test was used for variables with multiple categories such as educational attainment and position. The level of significance was set at 0.05.

2.8 Ethical Considerations

The study observed academic and institutional ethical standards. Permission was obtained from the appropriate authorities before the conduct of the study. Participation was voluntary, and respondents were informed about the purpose of the research, their role as participants, and the confidentiality of their responses. Informed consent was secured before data collection.

The anonymity and privacy of respondents were maintained throughout the study. The data gathered were used only for academic purposes and were presented in aggregate form. The researchers also ensured responsible data handling and protection of sensitive information in accordance with accepted ethical standards and data privacy practices.

3. Results and Discussion

3.1 Profile of the Respondents

The study involved 98 respondents composed of key officials, teachers, and staff of St. Jude Thaddeus International School. The key officials had a mean age of 49.10 years, indicating that they were generally mature and experienced members of the institution. Most of them were female, and the majority had completed master's degrees. Their positions included principal, department head, school counselor, school nurse, and head of support services, showing that leadership and support functions were represented in the study.

The teachers had a mean age of 32.82 years. Most were female, and the majority had bachelor's degrees, while a smaller group had master's degrees. This indicates that the teaching workforce was composed mostly of relatively young professionals who were actively engaged in instructional work and professional growth.

The staff had a mean age of 32.02 years. Most were female and had bachelor's degrees. The majority were administrative staff, while a few belonged to maintenance, operational, support, and specialist roles. This indicates that the staff respondents were largely involved in daily institutional operations, including records management, coordination, and administrative support.

Overall, the profile of the respondents shows that the study gathered insights from groups with different levels of experience, educational background, and institutional responsibility. This diversity strengthened the assessment because it included perspectives from leadership, teaching, and operational personnel.

3.2 Level of Organizational Readiness for Implementing the Centralized Digital Profile System

The findings showed that organizational readiness was generally rated as high. The overall mean for organizational readiness was 4.01, interpreted as high. This indicates that the institution was generally prepared to implement the Centralized Digital Profile System.

Leadership support and commitment obtained a mean of 4.12, interpreted as high. This suggests that institutional leaders were perceived to provide sufficient guidance, direction, and support for digital system implementation. Change management capability obtained a mean of 4.08, also interpreted as high, indicating that the institution had the capacity to manage transitions and support personnel during the adoption of new systems.

Staff digital competency and training needs obtained a mean of 3.96, interpreted as high. This suggests that personnel had adequate digital capability but still required continuous training to sustain effective system use. Financial and resource preparedness obtained a mean of 3.88, also interpreted as high, although it was the lowest among the four dimensions. Among key officials, financial and resource preparedness was rated only moderate, suggesting that resource sustainability may still require further strengthening.

These results imply that the institution has a strong foundation for digital system implementation. However, the lower rating on financial and resource preparedness indicates the need for careful budgeting, long-term resource planning, and sustained institutional support.

3.3 Administrative Process Requirements for the Centralized Digital Profile System

The findings showed that administrative process requirements were generally rated high across all respondent groups. Key officials obtained an overall mean of 3.95, teachers obtained 4.13, and staff obtained 4.16, all interpreted as high. This indicates that the institution recognized the importance of structured administrative processes in supporting the implementation of the Centralized Digital Profile System.

Student data management needs were rated high by all respondent groups, indicating that accurate data entry, regular updating, data validation, controlled access, and efficient retrieval of student information were considered important. Record keeping and documentation standards were also rated high, suggesting the need for standardized documentation, proper archiving, and clear accountability in handling records.

Reporting and analytics requirements were rated high, showing that the respondents recognized the importance of system-generated reports, timely information, and data-based decision-making. Workflow integration and automation needs received particularly strong ratings, with teachers and staff rating this dimension very high. This suggests that those directly involved in daily operations perceived a strong need to reduce manual tasks, minimize delays, and integrate workflows across offices and departments.

Overall, the results show that administrative process requirements are essential to the success of the proposed system. A centralized system cannot function effectively without clear procedures, standardized documentation, integrated workflows, and reliable reporting mechanisms.

3.4 Extent of Privacy Measures for the Centralized Digital Profile System

The findings showed that privacy measures were implemented to a great extent, with an overall mean of 4.14. This indicates that the institution had existing data protection and security practices that could support the safe implementation of the Centralized Digital Profile System.

Data protection policies and compliance obtained the highest mean of 4.25, interpreted as very great extent. This suggests that the institution placed strong importance on protecting sensitive information and complying with data protection requirements. Access control and user authentication obtained a mean of 4.13, interpreted as great extent, indicating that mechanisms for controlling system access were already present.

Data backup and recovery systems obtained a mean of 4.07, while cybersecurity awareness and training obtained a mean of 4.12, both interpreted as great extent. These results suggest that the institution had measures for safeguarding data, preventing loss, and promoting awareness of cybersecurity responsibilities.

The findings imply that privacy measures are already established within the institution but still require continuous strengthening. Since centralized systems involve the collection, storage, and processing of sensitive personal and institutional data, privacy protection must remain a major priority in system implementation.

3.5 Significant Relationship Between Profile Variables and Organizational Readiness, Administrative Process Requirements, and Privacy Measures

The study found significant relationships between selected profile variables and organizational readiness. Age, educational attainment, and position were significantly related to organizational readiness among the respondent groups, while sex was not significant. This indicates that perceptions of readiness were influenced more by experience, educational preparation, and institutional role than by sex.

For organizational readiness, age showed significant relationships among key officials, teachers, and staff, with p-values of 0.032, 0.021, and 0.045, respectively. Educational attainment was also significant, with p-values of 0.018, 0.025, and 0.031. Position was significant among key officials and staff, with p-values of 0.041 and 0.039. Sex was not significant across all groups.

The study also found significant relationships between selected profile variables and administrative process requirements. Age, educational attainment, and position were significant, while sex was not significant. This suggests that perceptions of administrative process needs were shaped by respondents' experience, role, and educational background.

For administrative process requirements, age showed significant relationships among key officials, teachers, and staff, with p-values of 0.041, 0.030, and 0.047. Educational attainment was significant, with p-values of 0.022, 0.034, and 0.040. Position was significant among key officials and staff, with p-values of 0.039 and 0.042. Sex showed no significant relationship.

The study further found significant relationships between selected profile variables and privacy measures. Age, educational attainment, and position were significant, while sex was not significant. This indicates that awareness and perceptions of privacy practices were influenced by professional exposure, educational preparation, and institutional responsibility.

For privacy measures, age was significant among key officials, teachers, and staff, with p-values of 0.028, 0.036, and 0.049. Educational attainment was also significant, with p-values of 0.019, 0.028, and 0.033. Position was significant among key officials and staff, with p-values of 0.045 and 0.038. Sex was not significant across the respondent groups.

These findings suggest that system implementation activities should consider differences in respondent roles, experience, and educational background. Training, orientation, and capacity-building programs may be more effective if they are designed according to the responsibilities and needs of each respondent group.

3.6 Proposed Strategic Implementation Plan for the Centralized Digital Profile System

Based on the findings, the study proposed a Strategic Implementation Plan for the Centralized Digital Profile System. The plan was developed to strengthen organizational readiness, improve administrative processes, and reinforce privacy and cybersecurity practices.

The proposed plan focuses on strengthening participatory leadership and staff involvement through consultation meetings, feedback sessions, and planning workshops. This responds to the need for broader staff participation and stronger ownership of the system. It also includes the development of a formal change management plan to guide communication, transition protocols, and system adoption procedures.

The plan further emphasizes continuous staff digital competency development through training sessions, workshops, and hands-on system simulations. This is important because system sustainability depends on the ability of personnel to use digital tools effectively. Financial and resource preparedness is also addressed through annual budget allocation for system maintenance, upgrades, and training.

For administrative processes, the plan recommends the standardization of data management procedures, improvement of documentation practices, enhancement of reporting systems, and integration of workflow automation across offices and

departments. For privacy and security, the plan recommends updating data protection policies, strengthening access control, ensuring reliable backup and recovery systems, and conducting regular cybersecurity awareness activities. The proposed strategic implementation plan serves as a practical guide for the institution. It supports the development of a centralized digital system that is organized, functional, secure, and sustainable.

3.7 Relationship Among Organizational Readiness, Administrative Process Requirements, and Privacy Measures

The study established significant relationships among organizational readiness, administrative process requirements, and privacy measures. The relationship between organizational readiness and administrative process requirements obtained a correlation coefficient of 0.712 with a p-value of 0.000, indicating a strong and significant relationship.

The relationship between organizational readiness and privacy measures obtained a correlation coefficient of 0.689 with a p-value of 0.000, also indicating a significant relationship. This means that institutions with stronger readiness are more likely to have better privacy practices because leadership support, staff capability, and resource preparedness contribute to data protection and system security.

The relationship between administrative process requirements and privacy measures obtained the highest correlation coefficient of 0.745 with a p-value of 0.000. This indicates that structured administrative processes are strongly connected to effective privacy measures. Clear workflows, documentation standards, and reporting procedures help ensure that data are properly handled, protected, and monitored.

These findings confirm that organizational readiness, administrative process requirements, and privacy measures are interconnected. A centralized digital system cannot be implemented successfully by focusing on only one area. Institutional preparedness, operational processes, and data protection safeguards must work together to support effective, secure, and sustainable implementation.

4. Conclusion & Recommendations

The study concludes that St. Jude Thaddeus International School is generally prepared for the implementation of the Centralized Digital Profile System. Organizational readiness was rated high, showing that leadership support, change management capability, staff digital competency, and resource preparedness were sufficiently established. However, financial and resource preparedness should still be strengthened to ensure long-term sustainability.

The study also concludes that administrative process requirements were rated high, indicating that clear procedures for student data management, record keeping, reporting, and workflow automation are necessary for the successful operation of the system. Privacy measures were implemented to a great extent, showing that the institution already had data protection, access control, backup, and cybersecurity practices that could support secure system implementation.

Significant relationships were found between selected profile variables and the three major study variables. Age, educational attainment, and position were significantly related to organizational readiness, administrative process requirements, and privacy measures, while sex was not significant. This means that professional background, experience, and institutional role influence how respondents perceive digital system implementation.

The study further concludes that organizational readiness, administrative process requirements, and privacy measures are strongly and significantly related. This indicates that successful system implementation depends on the combined strength of institutional preparedness, efficient administrative operations, and responsible data protection practices.

It is recommended that the institution sustain and strengthen organizational readiness by enhancing leadership support, broadening staff participation, and improving financial and resource planning. Administrative processes should be improved through standardized data management procedures, stronger documentation practices, enhanced reporting systems, and workflow automation. Privacy measures should be reinforced through updated data protection policies, stronger access controls, reliable backup and recovery systems, and regular cybersecurity training.

The institution may adopt, monitor, and periodically review the proposed Strategic Implementation Plan to ensure that the Centralized Digital Profile System remains responsive, secure, efficient, and sustainable. Future studies may be conducted in other educational institutions to validate the findings and compare readiness, administrative processes, and privacy measures across different school settings.

Compliance with ethical standards

This study complied with applicable academic and institutional ethical standards in the conduct of research involving human participants. Participation in the survey was voluntary, and respondents were informed of the purpose of the study, the nature of their participation, and the confidentiality of the data gathered. Informed consent was secured before data collection. All responses were treated with confidentiality and used strictly for academic and research purposes. The data were presented in aggregate form to protect the identity of the respondents. The researchers observed honesty, proper attribution of sources, and respect for participant welfare throughout the conduct of the study. No conflict of interest was declared, and the manuscript remains the intellectual work of the authors, with all cited materials duly acknowledged in accordance with scholarly and ethical standards.

REFERENCES

- Abraham, R., Schneider, J., & vom Brocke, J. (2019). Data governance: A conceptual framework. *Business & Information Systems Engineering*, 61(6), 605–620. <https://doi.org/10.1007/s12599-019-00586-w>
- Begicevic Redjep, N., Balaban, I., & Zugec, B. (2021). Assessing digital maturity of schools: Framework and instrument. *Technology, Pedagogy and Education*, 30(5), 643–658. <https://doi.org/10.1080/1475939X.2021.1944291>
- Berghaus, S., & Back, A. (2024). Organizational digital transformation readiness: An exploratory investigation. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(4), 3283–3304. <https://doi.org/10.3390/jtaer19040159>
- Carmo, J. E. S., Lacerda, D. P., Klingenberg, C. O., & Piran, F. A. S. (2025). Digital transformation in the management of higher education institutions. *Sustainable Futures*, 9, 100692. <https://doi.org/10.1016/j.sfr.2025.100692>
- Cheng, E. C. K., & Wang, T. (2023). Leading digital transformation and eliminating barriers for teachers to incorporate artificial intelligence in basic education in Hong Kong. *Computers and Education: Artificial Intelligence*, 5, 100171. <https://doi.org/10.1016/j.caeai.2023.100171>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. European Commission. (2020). *Digital education action plan (2021–2027)*. <https://education.ec.europa.eu>
- McCarthy, A. M., Maor, D., McConney, A., & Cavanaugh, C. (2023). Digital transformation in education: Critical components for leaders of system change. *Social Sciences & Humanities Open*, 8(1), 100479. <https://doi.org/10.1016/j.ssaho.2023.100479>
- Mergel, I., Edelman, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. <https://doi.org/10.1016/j.giq.2019.06.002>
- Mukul, E., & Büyüközkan, G. (2023). Digital transformation in education: A systematic review of Education 4.0. *Technological Forecasting and Social Change*, 194, 122664. <https://doi.org/10.1016/j.techfore.2023.122664>
- National Institute of Standards and Technology. (2024). *Cybersecurity framework (CSF) 2.0*. U.S. Department of Commerce. <https://www.nist.gov>
- OECD. (2023). *Digital government review: Strengthening the digital transformation of the public sector*. OECD Publishing.
- Organisation for Economic Co-operation and Development. (2020). *The OECD digital government policy framework*. OECD Publishing.
- Poulová, P., Simonová, I., & Kacatl, J. (2024). Evaluating digital maturity in higher education institutions. *Digital*, 6(4), 130.
- Rothwell, W. J. (2022). *Effective succession planning* (6th ed.). AMACOM.
- Schein, E. H. (2017). *Organizational culture and leadership* (5th ed.). Wiley.
- Schmitz, M.-L., Antonietti, C., Consoli, T., Cattaneo, A., Gonon, P., & Petko, D. (2023). Transformational leadership for technology integration in schools. *Computers & Education*, 204, 104880. <https://doi.org/10.1016/j.compedu.2023.104880>
- UNESCO. (2023). *Global education monitoring report 2023: Technology in education*. UNESCO Publishing. <https://www.unesco.org>
- United States Department of Education, Office of Educational Technology. (2024). *National educational technology plan*.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
- Veseli, A., Hasanaj, P., & Bajraktari, A. (2025). Perceptions of organizational change readiness for sustainable digital transformation. *Sustainability*, 17(2), 619. <https://doi.org/10.3390/su17020619>
- Whitman, M. E., & Mattord, H. J. (2018). *Principles of information security* (6th ed.). Cengage Learning.
- World Bank. (2021). *Digital development overview*. <https://www.worldbank.org>