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Digital Maturity and Business Resilience: Analyzing The Role of Information Systems in Post-Pandemic Recovery Strategies for Philippine Diocesan Schools

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ABSTRACT

The COVID-19 pandemic exposed profound vulnerabilities in the information systems infrastructure of Philippine diocesan schools, forcing a rapid and often unplanned transition to digital learning and administrative operations. This study investigates how digital maturity influences business resilience in Philippine diocesan schools during post-pandemic recovery. Using qualitative research and secondary data analysis, the study examines the relationship between information systems capability, organizational agility, governance structures, and institutional sustainability. Findings indicate that digital maturity is a critical determinant of post-pandemic recovery, with institutions demonstrating higher levels of IT governance achieving faster operational normalization and sustained enrollment. However, significant gaps persist in cybersecurity posture, data privacy compliance, and legacy system modernization. The study underscores the necessity for diocesan schools to adopt governance-centered digital transformation strategies that balance technological investment with institutional mission and resource constraints.

Keywords: *Digital Maturity, Business Resilience, Information Systems, Post-Pandemic Recovery, Diocesan Schools, IT Governance, Philippines*

INTRODUCTION

The COVID-19 pandemic fundamentally disrupted educational delivery worldwide, forcing over 1.6 billion learners out of physical classrooms at its peak in 2020 (World Bank, 2022). In the Philippines, where internet connectivity and digital infrastructure remained unevenly distributed, the transition to remote learning exposed systemic vulnerabilities in the information systems capabilities of educational institutions (CHED, 2022). Diocesan schools—private Catholic educational institutions operating under religious dioceses—faced unique challenges, including limited budgets, reliance on donor funding, and governance structures that often prioritize mission continuity over technological innovation (DepEd, 2022).

Digital maturity, defined as an organization's ability to leverage digital technologies and information systems to achieve strategic objectives, has emerged as a critical predictor of organizational resilience in times of crisis (Kane et al., 2021). For educational institutions, digital maturity encompasses not only the availability of hardware and software but also the integration of information systems into core administrative and pedagogical processes, the presence of robust IT governance frameworks, and the cultivation of digital competencies among staff and students (Fahd et al., 2021). Business resilience, in turn,

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refers to an organization's capacity to anticipate, prepare for, respond to, and adapt to disruptive events while maintaining continuous operations and safeguarding stakeholder interests (Denyer, 2020).

The pandemic served as an unplanned stress test for the information systems of Philippine diocesan schools (Duchek, 2020). Institutions with higher levels of digital maturity—characterized by integrated Student Information Management Systems (SIMS), cloud-based platforms, and established IT governance—were better positioned to transition to remote operations, maintain enrollment, and sustain stakeholder confidence (BCG, 2020). Conversely, schools reliant on legacy systems, manual processes, and fragmented digital tools experienced significant disruptions, data loss incidents, and declines in student retention (European Commission, 2021).

From a business management perspective, information systems are no longer merely operational tools but strategic assets that directly influence institutional competitiveness, financial sustainability, and long-term viability (Villaronte & Yuesti, 2025). As global marketing management principles suggest, institutions that effectively communicate their digital capabilities and resilience to prospective students and their families gain competitive advantage in an increasingly discerning educational marketplace (Villaronte, 2026). The alignment of information systems strategy with institutional mission, donor relations, and stakeholder expectations is therefore essential for post-pandemic recovery and future growth (Osano et al., 2026).

This study addresses a critical gap in the literature by examining the specific relationship between digital maturity and business resilience in the context of Philippine diocesan schools (Tupaz et al., 2025). While extensive research exists on digital transformation in higher education generally, limited attention has been paid to the unique governance, financial, and cultural constraints of Catholic diocesan institutions in developing economies (Sipayung et al., 2022). Understanding how information systems capabilities contribute to organizational resilience in this context is essential for guiding resource allocation, governance reforms, and strategic planning in the post-pandemic era (Ramachandran & Thangamani, 2020).

Literature Review

Digital Maturity: Definitions and Frameworks

Digital maturity refers to the extent to which an organization has integrated digital technologies, information systems, and data-driven processes into its operations, culture, and strategic decision-making (Rogers, 2020). Unlike mere digitization—the conversion of analog to digital formats—digital maturity encompasses the strategic deployment of information systems to create value, enhance agility, and enable innovation (Verhoef et al., 2021). Several frameworks have been developed to assess digital maturity across organizational contexts. The Digital Maturity Model (DMM) developed by Google and Boston Consulting Group identifies five progressive stages: nascent, emerging, connected, multi-moment, and intelligent (BCG, 2020). Similarly, the European Commission's Digital Maturity Assessment tool for schools evaluates infrastructure, teacher competence, administrative systems, and strategic leadership (European Commission, 2021).

In educational contexts, digital maturity extends beyond technology acquisition to include the alignment of information systems with pedagogical goals, the development of digital literacy among staff and students, and the establishment of governance structures that ensure data security, privacy compliance, and system reliability (Porcu et al., 2020). For diocesan schools, digital maturity is further complicated by resource constraints, reliance on legacy systems, and governance models that may not prioritize IT investment (Villaronte & Guevarra, 2024). The National Privacy Commission (2024) has also emphasized that digital maturity must incorporate privacy engineering and data protection as foundational components rather than afterthoughts.

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Business Resilience in Educational Institution

Business resilience is the capacity of an organization to absorb disruptions, adapt to changing circumstances, and emerge stronger from crises (Lengnick-Hall et al., 2020). Williams et al. (2021) conceptualize organizational resilience as comprising three phases: anticipation (identifying potential threats), coping (responding effectively to disruptions), and adaptation (learning and transforming after crises). In the context of educational institutions, resilience encompasses financial sustainability, enrollment stability, operational continuity, and stakeholder confidence (Saad et al., 2021).

The pandemic tested these resilience dimensions severely (Bartik et al., 2020). Institutions with diversified revenue streams, strong donor relationships, and effective crisis communication were better positioned to weather the disruption (Villaronte & Guevarra, 2024). However, information systems played an equally critical role: schools with robust learning management systems, integrated student information platforms, and reliable communication tools maintained instructional continuity and administrative functionality while less digitally mature institutions struggled (Almaiah et al., 2020). Business resilience in the post-pandemic era thus requires not only financial and operational preparedness but also digital preparedness (Teeroovengadum et al., 2021).

Information Systems as Strategic Assets

From a strategic management perspective, information systems have evolved from supporting operational efficiency to enabling competitive differentiation and value creation (Bharadwaj et al., 2020). The resource-based view of the firm suggests that information systems capabilities—when they are valuable, rare, inimitable, and organizationally supported—can constitute sources of sustainable competitive advantage (Wade & Hulland, 2004). In the educational sector, information systems capabilities include not only technical infrastructure but also IT governance maturity, data analytics capacity, and the alignment of IT strategy with institutional goals (COBIT, 2019).

For Philippine diocesan schools, information systems serve multiple strategic functions (Villaronte & Yuesti, 2025). They enable enrollment management, facilitate donor communication and reporting, support compliance with government regulations and privacy laws, and provide data for strategic decision-making (Osano et al., 2026). The pandemic demonstrated that these functions cannot be sustained without resilient information systems (Tupaz et al., 2025). Schools with cloud-based platforms, automated workflows, and comprehensive data backup protocols maintained operations during lockdowns, while those reliant on on-premise servers and manual processes experienced significant disruptions (Sipayung et al., 2022).

Post-Pandemic Recovery in Philippine Education

The Philippine education sector experienced one of the longest pandemic-related school closures globally, with in-person classes suspended for approximately two years (OECD, 2023). Learning poverty—the inability to read and understand a simple text by age ten—increased dramatically, and enrollment declines were observed across both public and private institutions (UNESCO, 2021). For private schools, particularly diocesan institutions that depend on tuition revenue and donor support, enrollment declines translated directly into financial stress (World Bank, 2023).

Recovery strategies have focused on multiple fronts: learning remediation, infrastructure rehabilitation, teacher professional development, and financial assistance programs (ADB, 2021). However, information systems modernization has received comparatively less attention, despite its enabling role across all other recovery domains (ILO, 2021). Without resilient information systems, efforts to track student progress, manage enrollment, process financial aid, and communicate with stakeholders are severely hampered (SEAMEO, 2022). The post-pandemic period thus represents both a challenge and an opportunity for diocesan schools to invest in digital maturity as a foundation for long-term resilience (Villaronte, 2026).

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Governance, Privacy, and Cybersecurity Dimensions

Digital maturity in Philippine diocesan schools must be understood within the regulatory context of the Data Privacy Act of 2012 (Republic Act No. 10173) and subsequent issuances from the National Privacy Commission (NPC, 2025). The NPC has emphasized that information systems processing personal data—including student records, enrollment information, and academic histories—must incorporate privacy-by-design principles, transparency mechanisms, and accountability structures (NPC, 2024). Schools with higher digital maturity are better positioned to comply with these requirements, while those with fragmented systems and undocumented processes face elevated compliance risks (Tupaz et al., 2025).

Cybersecurity is another critical dimension of digital maturity (NIST, 2022). The pandemic saw a global surge in cyberattacks targeting educational institutions, including ransomware incidents that disrupted operations and exposed sensitive student data (ENISA, 2021). Philippine diocesan schools, with limited IT security staff and legacy systems, are particularly vulnerable (Sipayung et al., 2022). The NIST Cybersecurity Framework (2024) provides a structured approach to assessing and improving cybersecurity posture, but adoption among diocesan schools remains uneven (NIST, 2024). Integration of zero trust principles (Rose et al., 2020) and secure software development practices (NIST, 2022) are essential components of digital maturity.

Cultural and Organizational Factors

Digital transformation in diocesan schools is not solely a technical challenge—it is also a cultural and organizational one (Hofstede, 2020). Hofstede's cultural dimensions theory suggests that organizations in collectivist societies, such as the Philippines, may exhibit greater resistance to change, stronger hierarchical structures, and a preference for relational over procedural decision-making (Minkov & Kaasa, 2021). These cultural characteristics can either facilitate or impede digital maturity initiatives, depending on how they are addressed by leadership (Beugelsdijk et al., 2020).

Successful digital transformation requires not only investment in technology but also attention to change management, staff motivation, and the alignment of digital initiatives with institutional mission (Villaronte, 2026). Diocesan schools, with their distinctive Catholic identity and mission focus, must ensure that digital modernization reinforces rather than undermines their core values (Villaronte & Yuesti, 2025). This alignment is essential for maintaining donor confidence, stakeholder trust, and institutional coherence (Villaronte & Guevarra, 2024).

METHODS

This study employed a qualitative research design grounded in secondary data analysis to examine the relationship between digital maturity and business resilience in Philippine diocesan schools during the post-pandemic recovery period (Creswell & Poth, 2018). The qualitative approach was appropriate for exploring the nuanced, context-driven relationship between information systems capabilities, organizational resilience, and institutional outcomes across diverse institutional settings (Merriam & Tisdell, 2015)

Data Sources

Multiple secondary sources were analyzed to ensure depth and triangulation (Patton, 2015), including: Peer-reviewed journal articles from JSTOR, ScienceDirect, and Google Scholar (2020-2025) focusing on digital maturity, information systems governance, business resilience, and post-pandemic recovery in educational institutions (Flick, 2018). Institutional and policy reports from organizations such as the Commission on Higher Education (CHED), Department of Education (DepEd), UNESCO, OECD, and the World Bank, which provide data on Philippine education sector recovery, digital infrastructure, and policy interventions (CHED, 2022; DepEd, 2022; OECD, 2023; UNESCO, 2021; World Bank, 2022).

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Case studies and published assessments of digital transformation initiatives in Philippine private schools, including diocesan institutions, from academic and practitioner publications (ADB, 2021; SEAMEO, 2022). Regulatory issuances from the National Privacy Commission (2024, 2025) and the Data Privacy Act of 2012, providing the legal and compliance context for information systems implementation (Republic of the Philippines, 2012). Framework documentation from NIST (CSF 2.0, SSDF, SP 800-207), ISO/IEC 25010:2023, and COBIT 2019, establishing the technical and governance standards against which digital maturity was evaluated (NIST, 2022, 2024; Rose et al., 2020; COBIT, 2019).

Analytical Method

The data were analyzed using thematic analysis, a method suitable for identifying, analyzing, and interpreting patterns or themes across qualitative data (Braun & Clarke, 2021). The analysis focused on recurring themes related to digital maturity indicators, business resilience dimensions, information systems capabilities, governance structures, privacy and cybersecurity compliance, and institutional, cultural, and resource factors affecting digital maturity (Nowell et al., 2017). Coding was both inductive and deductive, allowing themes to emerge from the data while remaining anchored in the conceptual framework derived from digital maturity models, resilience theory, and information systems governance literature (Saldaña, 2021).

Theoretical Framework

This study is guided by two complementary frameworks (Yin, 2018):

1. *Digital Maturity Framework* - Drawing from the Digital Maturity Model (BCG, 2020) and educational technology assessment frameworks (European Commission, 2021; Fahd et al., 2021), this framework provides a structured approach to evaluating the extent to which diocesan schools have integrated information systems into their operations, strategy, and culture (Rogers, 2020).
2. *Organizational Resilience Framework* - Drawing from Denyer (2020) and Duchek (2020), this framework conceptualizes resilience as a multi-phase process encompassing anticipation, coping, and adaptation, enabling analysis of how digital maturity influences each phase of the resilience lifecycle (Lengnick-Hall et al., 2020; Williams et al., 2021).

These frameworks enable a comprehensive understanding of how digital maturity contributes to business resilience in the specific context of Philippine diocesan schools navigating post-pandemic recovery (Villaronte, 2026; Osano et al., 2026).

RESULTS AND DISCUSSION

Digital Maturity Among Philippine Diocesan Schools

The analysis reveals that digital maturity among Philippine diocesan schools varies considerably, with a significant concentration at lower maturity levels (BCG, 2020). Consistent with the Digital Maturity Model's stages, most diocesan schools fall within the "emerging" to "connected" range, with few reaching "multi-moment" or "intelligent" status (European Commission, 2021). This distribution reflects several constraining factors: limited financial resources for technology investment, reliance on legacy systems (some in continuous use since 2015 or earlier), fragmented IT governance structures, and competing priorities for institutional funding (Villaronte & Guevarra, 2024).

A common pattern observed across diocesan schools is the presence of functional but aging Student Information Management Systems (SIMS) that support basic enrollment, grading, and record-keeping functions but lack integration with other systems (e.g., learning management, finance, donor management) and fail to incorporate modern security, privacy, and analytics capabilities (Fahd et al., 2021). This

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configuration—characterized by the authors as the "legacy registrar trap"—provides sufficient functionality for day-to-day operations but leaves institutions vulnerable to disruptions, compliance risks, and missed opportunities for strategic advantage (Sipayung et al., 2022). "The pandemic revealed that systems adequate for normal operations were wholly inadequate for crisis conditions." (Tupaz et al., 2025)

Information Systems and Operational Continuity During the Pandemic

Schools with higher digital maturity demonstrated markedly better operational continuity during the pandemic (Westerman et al., 2020). Institutions with cloud-based SIMS, integrated learning management platforms, and established remote access protocols were able to transition to fully remote operations within days or weeks of lockdown announcements (Verhoef et al., 2021). These schools maintained enrollment registration, grade recording, transcript issuance, and student communication throughout the crisis period (Almaiah et al., 2020).

Conversely, schools with low digital maturity—characterized by on-premise servers accessible only from campus, manual or semi-manual administrative workflows, and absence of comprehensive data backup—experienced significant operational disruptions (Ramachandran & Thangamani, 2020). Some institutions were unable to access student records for months, delayed grade issuance by entire academic terms, and lost enrollment data due to hardware failures or cyber incidents (Bartik et al., 2020). These disruptions translated directly into student attrition, as families lost confidence in the institution's ability to deliver educational services reliably (Saad et al., 2021).

The relationship between information systems capability and operational continuity is not merely technical but also organizational (De Haes et al., 2020). Schools with established IT governance structures—including clear roles for data management, change control protocols, and documented disaster recovery procedures—were better prepared to implement remote operations even when their systems were not fully mature (COBIT, 2019). This finding suggests that governance investments may yield resilience benefits even in resource-constrained environments where comprehensive system replacement is not feasible (Porcu et al., 2020).

Cybersecurity, Privacy, and Compliance Vulnerabilities

The rapid transition to remote operations during the pandemic created significant cybersecurity and privacy vulnerabilities across Philippine diocesan schools (ENISA, 2021). Many institutions deployed ad hoc solutions—personal devices, consumer-grade collaboration tools, unsecured remote access—without adequate security controls or privacy safeguards (NIST, 2022). The analysis identified multiple documented incidents of data breaches, ransomware attacks, and privacy violations affecting diocesan schools during the pandemic period (Tupaz et al., 2025).

From a compliance perspective, these vulnerabilities place institutions at risk under the Data Privacy Act of 2012 (Republic of the Philippines, 2012). The National Privacy Commission (2024) has emphasized that organizations processing personal data must implement privacy-by-design principles, conduct privacy impact assessments, and maintain documentation of data processing activities (NPC, 2025). Schools with low digital maturity often lack these capabilities, exposing them to regulatory sanctions, reputational damage, and loss of stakeholder trust (Villaronte & Yuesti, 2025).

The NIST Cybersecurity Framework (2024) and Secure Software Development Framework (NIST, 2022) provide structured approaches for improving cybersecurity posture, but adoption among Philippine diocesan schools remains limited (Rose et al., 2020). Zero trust principles—which assume that no user or system should be trusted by default regardless of network location—are particularly relevant for post-pandemic environments where remote access has become routine (NIST, 2024). However, implementation requires investments in identity management, access controls, continuous monitoring, and encryption that many diocesan schools have not yet prioritized (Sipayung et al., 2022).

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Business Resilience Outcomes

The analysis reveals a clear association between digital maturity and business resilience outcomes in the post-pandemic period (Denyer, 2020). Schools with higher digital maturity have demonstrated faster enrollment recovery: institutions with integrated SIMS and online enrollment capabilities recovered pre-pandemic enrollment levels more quickly than those requiring in-person or manual enrollment processes (Duchek, 2020). They have also demonstrated sustained stakeholder confidence: schools with transparent data practices, reliable communication systems, and demonstrated commitment to data protection have maintained higher levels of trust among students, parents, and donors (Williams et al., 2021).

Enhanced donor relations represent another resilience outcome (Villaronte & Guevarra, 2024). Digital maturity enables more effective donor communication, impact reporting, and stewardship—functions essential for sustaining diversified revenue streams in diocesan institutions (Osano et al., 2026). Regulatory compliance is also improved: schools with mature information systems are better positioned to comply with privacy regulations, government reporting requirements, and accreditation standards, reducing legal and reputational risk (NPC, 2024). Finally, strategic agility is enhanced: higher digital maturity enables institutions to adapt more quickly to changing circumstances—whether new government policies, shifts in student preferences, or emerging competitive threats (Teeroovengadum et al., 2021).

These findings align with the organizational resilience framework proposed by Duchek (2020), which emphasizes that resilient organizations excel at anticipation (identifying threats), coping (responding effectively), and adaptation (learning and transforming) (Lengnick-Hall et al., 2020). Digital maturity contributes to each phase: mature information systems enable earlier detection of emerging risks, provide tools for coordinated crisis response, and generate data for post-crisis learning and improvement (Fahd et al., 2021).

Barriers to Digital Maturity

Despite the demonstrated benefits of digital maturity, Philippine diocesan schools face significant barriers to advancement (Villaronte, 2026). Financial constraints are primary: comprehensive information systems modernization requires capital investment, ongoing operational expenses, and specialized personnel—resources that are often scarce in diocesan institutions (Villaronte & Guevarra, 2024). The legacy of underinvestment in IT infrastructure, combined with competing priorities for limited funds (e.g., faculty salaries, facilities maintenance, scholarship programs), has perpetuated a cycle of technological stagnation (Ramachandran & Thangamani, 2020).

Organizational and cultural barriers are equally significant (Hofstede, 2020). Digital transformation requires changes to established workflows, roles, and decision-making processes—changes that may encounter resistance from staff accustomed to legacy systems and manual processes (Minkov & Kaasa, 2021). In diocesan schools, where organizational culture emphasizes tradition, hierarchy, and relational decision-making, the introduction of data-driven, automated systems may be perceived as threatening rather than enabling (Beugelsdijk et al., 2020). Leadership commitment to digital transformation is essential but not always present, particularly where school administrators lack familiarity with information systems strategy and governance (Villaronte & Yuesti, 2025).

Governance barriers also impede digital maturity (COBIT, 2019). Many diocesan schools lack formal IT governance structures, including clear roles for data ownership, change approval processes, risk management frameworks, and performance monitoring mechanisms (De Haes et al., 2020). Without these structures, technology decisions may be made ad hoc, investments may be misaligned with institutional priorities, and accountability for outcomes may be unclear (Porcu et al., 2020). The integration of privacy engineering and security by design requires governance structures that are often absent in less mature institutions (NPC, 2025).

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Strategic Implications for Post-Pandemic Recovery

The post-pandemic period represents a critical window for Philippine diocesan schools to invest in digital maturity as a foundation for long-term resilience (World Bank, 2023). The analysis suggests several strategic priorities (Villaronte, 2026). First, governance must precede technology (De Haes et al., 2020). Establishing clear roles, decision rights, and accountability structures for information systems is a prerequisite for effective technology investment (COBIT, 2019). Diocesan schools should consider adopting adapted versions of COBIT 2019 or NIST frameworks appropriate to their scale and resources (NIST, 2024).

Second, incremental modernization is preferable to "big bang" replacement (Westerman et al., 2020). Preserving legacy databases as systems of record while adding layered security, governance, and intelligence capabilities allows institutions to improve resilience without incurring the cost and risk of complete data migration (Verhoef et al., 2021). This layered architecture approach aligns with the resource constraints of diocesan schools while delivering measurable improvements in operational continuity and data protection (Fahd et al., 2021).

Third, digital maturity must incorporate privacy and cybersecurity as foundational components rather than add-ons (NPC, 2024). Compliance with the Data Privacy Act (Republic of the Philippines, 2012) and NPC guidance (2025) is not optional, and investments in privacy engineering and security controls should be prioritized alongside functional improvements (ENISA, 2021). Fourth, change management and staff development are essential (Villaronte, 2026). Technology alone does not produce resilience; resilient organizations require digitally competent staff who understand and embrace new systems and processes (Almaiah et al., 2020). Investment in training, communication, and motivational support is as important as investment in hardware and software (Villaronte & Yuesti, 2025).

Fifth, donor communication and stakeholder engagement should leverage digital maturity as a competitive differentiator (Villaronte & Guevarra, 2024). Institutions that can demonstrate robust data protection, reliable systems, and transparent operations are better positioned to retain existing students and attract new ones in a competitive post-pandemic marketplace (Osano et al., 2026).

CONCLUSION

This study examined the relationship between digital maturity and business resilience in Philippine diocesan schools during the post-pandemic recovery period (Villaronte & Yuesti, 2025). The findings demonstrate that digital maturity—the institutional capacity to leverage information systems strategically—is a critical determinant of operational continuity, stakeholder confidence, regulatory compliance, and long-term institutional sustainability (Westerman et al., 2020). Schools with higher digital maturity have recovered more quickly from pandemic disruptions, sustained enrollment more effectively, and maintained stronger relationships with donors and other stakeholders (Villaronte & Guevarra, 2024).

However, significant gaps persist (Tupaz et al., 2025). Most Philippine diocesan schools remain at low to moderate levels of digital maturity, constrained by financial limitations, legacy systems, governance deficits, and cultural barriers to change (Sipayung et al., 2022). The pandemic exposed these vulnerabilities, but the post-pandemic period offers an opportunity for strategic investment in information systems as a foundation for resilience (Osano et al., 2026).

The study contributes to both information systems research and educational management practice by demonstrating the applicability of digital maturity and organizational resilience frameworks to the specific context of Philippine diocesan schools (Fahd et al., 2021). It extends previous work on donor relations, income diversification, and global marketing management by highlighting the enabling role of information systems in sustaining stakeholder trust and institutional viability (Villaronte, 2026).

For diocesan school administrators, the study offers a strategic roadmap for digital transformation that respects resource constraints while delivering meaningful improvements in resilience (De Haes et al.,

2020). For policymakers and diocesan education offices, the study underscores the need for coordinated support—including technical assistance, funding mechanisms, and governance guidance—to accelerate digital maturity across the diocesan school network (World Bank, 2023).

Recommendation

1. Establish IT Governance Structures**.** Diocesan schools should formalize roles, decision rights, and accountability mechanisms for information systems management, adopting adapted versions of COBIT 2019 or NIST frameworks appropriate to their scale and resources (COBIT, 2019; De Haes et al., 2020). Governance structures must include data ownership, change approval, risk oversight, and performance monitoring (Porcu et al., 2020).
2. Prioritize Privacy and Cybersecurity Investments**.** Compliance with the Data Privacy Act (Republic of the Philippines, 2012) and NPC guidance (2024, 2025) is essential (NPC, 2024). Schools should implement privacy-by-design principles, conduct regular privacy impact assessments, and adopt zero trust principles (Rose et al., 2020) for access control and data protection (NIST, 2024).
3. Adopt Incremental Modernization Strategies**.** Rather than pursuing costly, high-risk system replacements, diocesan schools should adopt layered architectures that preserve legacy databases as systems of record while adding security, governance, and intelligence capabilities incrementally (Westerman et al., 2020; Verhoef et al., 2021).
4. Invest in Staff Development and Change Management**.** Technology alone does not produce resilience (Villaronte, 2026). Schools should invest in training, communication, and motivational support to build digital competencies and address resistance to change (Almaiah et al., 2020; Beugelsdijk et al., 2020).
5. Leverage Digital Maturity as a Competitive Differentiator**.** Institutions should communicate their digital capabilities, data protection practices, and operational reliability to prospective students, families, and donors as evidence of institutional quality and trustworthiness (Villaronte, 2026; Villaronte & Guevarra, 2024).
6. Establish Diocesan-Level Coordination and Support**.** Diocesan education offices should develop coordinated strategies for digital transformation across their school networks, including shared services, bulk procurement, technical assistance, and governance guidance (Osano et al., 2026; World Bank, 2023).
7. **.** Schools should adopt digital maturity assessment frameworks to track progress, identify gaps, and guide investment priorities (BCG, 2020; European Commission, 2021). Regular assessment enables evidence-based decision-making and demonstrates accountability to stakeholders (Fahd et al., 2021).

By aligning digital transformation with institutional mission, governance best practices, and the unique cultural context of Philippine Catholic education (Hofstede, 2020; Minkov & Kaasa, 2021), diocesan schools can build the digital maturity necessary for sustained resilience in an uncertain post-pandemic future (Villaronte & Yuesti, 2025).

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