Original Article

Digital Transformation Readiness and User Acceptance of an Integrated Management Information System in a Public HEI in Northern Mindanao

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Abstract

Digital transformation in higher education requires institutions to assess organizational readiness and user acceptance before implementing complex information systems such as an Integrated Management Information System (IMIS). This study evaluates the readiness of Northern Bukidnon State College for IMIS adoption using a descriptive-evaluative quantitative design. Data were collected through a structured survey administered to 100 active faculty and administrative personnel who regularly use the institution's existing integrated system. Guided by the Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology, the study analyzed user perceptions of system usability, functionality, and facilitating conditions. Findings revealed high levels of perceived usefulness (M = 4.30) and ease of use (M = 4.31), indicating strong user acceptance of the current system. Technical support and responsiveness were also rated positively, reflecting favorable institutional support. However, training and structured orientation received a low exposure rating (M = 0.63), highlighting a significant gap in operational readiness and workforce preparation. Regression analysis further showed that facilitating conditions, particularly training-related support, significantly influence user satisfaction and system acceptance. Overall, the findings suggest that NBSC demonstrates partial readiness for IMIS implementation. While technical and usability foundations are well established, successful digital

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transformation will depend on strengthening structured training, user orientation, and institutional capacity-building initiatives.

Keywords: digital transformation, integrated system, integrated management system, school system

1. Introduction

In the current digital era, numerous educational institutions, including colleges and universities, face the need for digital transformation to improve the efficiency of their administrative processes (Chugh et.al., 2023). The traditional method of managing data and documents, such as manual, paper-based transactions, often leads to problems, including process delays, data errors, a lack of transparency, and difficulty organizing records (Mawarti & Yaya, 2025; Dahyanti & Hamini, 2025). In various studies, it has been shown that the use of an integrated information system in higher education institutions enhances administrative efficiency (Ogundipe et al., 2023) and provides a more systematic management of information (Nugroho et al., 2025; Soegoto et.al,, 2023; Alqashami & Mohammad, 2015). Nevertheless, not all digital initiatives can succeed if the institution and users aren't properly prepared. The state of readiness of an institution usually involves not just technical aspects but also system usability, accessibility, user experience, and the institutional support provided.

As a result, the Northern Bukidnon State College (NBSC) views digital transformation as a strategic step in enhancing administrative operations. However, before implementing a more integrated system, it is important to first understand the current state of the system in use and its employees' experiences. Understanding it provides a clear visualization of the potential limitations and readiness-related situations that can affect the successful adoption of a new system. Therefore, this study aims to assess NBSC's organizational readiness by examining user experiences and the status of the existing integrated system, serving as a baseline for pre-implementation analysis of the Integrated Management Information System (IMIS).

The rationale of this study not only focuses on the technical aspects of the system but also on the broader institutional context and the users who use it. Even with a system in place, the success of digital transformation still largely depends on user experience, user knowledge, and the institution's support (Bravo-Jaico et al., 2025; Singun, 2025). Many institutions lack clear processes, orientation, and user readiness, hindering effective technology use. Because of this, assessing the current state of the system and its users is a critical step in identifying areas that need additional enhancement before implementing a more integrated system, such as IMIS. Even with an existing integrated system at NBSC, this does not guarantee that the institution and its employees are ready to adopt a more complex and comprehensive system (Venkatesh et.al, 2016). The literature shows that adopting new technology usually depends on perceived usefulness, ease of use, and facilitating factors within an

institution. In this context, the study used the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) as its theoretical frameworks. These models help in understanding the perspectives and circumstances that usually affect the adoption of a system before it is fully implemented.

This study is guided by the central research question: *What is the level of organizational readiness of Northern Bukidnon State College (NBSC) for the adoption of an Integrated Management Information System (IMIS)?* Specifically, the research aims to assess and critically examine NBSC's readiness for IMIS implementation by analyzing both the current state of its existing integrated systems and the user experience associated with them. It seeks to evaluate users' perceived usability, system accessibility, and overall interaction with the current platform, while identifying operational limitations, process gaps, and support requirements that may influence successful system adoption. Furthermore, the study aims to establish an empirical baseline to inform evidence-based recommendations for strategic pre-implementation planning, thereby enhancing institutional preparedness for IMIS deployment.

This study focuses on assessing the organizational readiness of Northern Bukidnon State College for adopting the Integrated Management Information System (IMIS). The study's coverage includes user experience, perceived usability, accessibility, and organizational factors related to the use of the existing integrated system. The study doesn't include the actual implementation or pilot testing of IMIS, as the system hadn't yet been implemented at the time of the research. Therefore, the research approach is descriptive-evaluative and focuses solely on the institution's current integrated system as the baseline for pre-implementation analysis. The full technical testing, workflow benchmarking, and evaluation of all IMIS modules were recommended for future studies.

Consistent with the study's objective of establishing an empirical baseline for IMIS pre-implementation, this research assesses the organizational readiness of Northern Bukidnon State College (NBSC) for the adoption of an Integrated Management Information System (IMIS). The scope encompasses an analysis of user experience, perceived usability, system accessibility, and key organizational factors associated with the current integrated system. The study is delimited to a pre-implementation context, as IMIS had not yet been introduced at the time of the research. Accordingly, a descriptive-evaluative design is employed to generate a comprehensive understanding of existing conditions that may influence system adoption. The full technical testing, workflow benchmarking, and evaluation of all IMIS modules were recommended for future studies.

1.1 Literature Review

The digital transformation in higher education is a persistent movement that reshapes all aspects of institutional operations, pedagogical practices, and

organizational culture. In the international context, DT was viewed not just as a technological innovation but as a holistic process that requires a reimagination of the entire administrative and education systems. According to Benavides (2020), a systematic literature review, DT in HEIs was grounded in technological, organizational, and social perspectives, with social dimensions as the primary focus of academic study. The study mentioned shows that DT is not limited to technology implementation but also involves rethinking and reinventing an institution's culture, business processes, and administrative mechanisms.

In the global trend, OECD (2023) shows a clear difference between digital transition and digital transformation. While transition involves the use of digital tools such as LMS and SIS, the real transformation involves a systematic overhaul of processes, including data interoperability, technology integration, and personalized teaching and student support. The insufficiency of coherence and interoperability across many countries with the OECD demonstrates that many systems still don't reach true digital maturity, necessitating a system-wide governance framework and much clearer standards for digital competencies.

The role of digitalization in improving institutional efficiency is also evident in Fernández's (2023) study, which shows that many HEIs remain at the primary level of digital maturity. The limited digital strategy and the fragmentation of digital transformation initiatives led to inefficient processes, a lack of data-driven decision-making, and an uncoordinated service system. Despite this, the use of emerging technologies - such as cloud computing, artificial intelligence, and advanced analytics - indicates their potential to improve decision support, security, and service delivery, provided they are supported by a strong digital strategy and integrated with organizational goals. In the international context, empirical evidence shows that the pandemic has further deepened digital transformation. In Latin America and the Caribbean, the IADB (2023) report highlights that COVID-19 is an important catalyst for the adoption of blended and digital learning. Despite lacking digital maturity and organizational readiness, the pandemic pushed institutions to transform their service delivery models. However, the major hindrance remains organizational and individual factors, including teacher capability, the culture of transformation administration, and institutional alignment.

In Africa, Ajani's (2024) systematic review widens the discourse on DT by introducing critical themes, including infrastructure readiness, digital literacy gaps, pedagogical innovation, and faculty development. The disparity in technology access between urban and rural HEIs demonstrated the growing reliability of technology in supporting flexible learning and institutional agility. Additionally, the empirical perspective in South Africa, as noted by Mhlanga (2022), indicates that the pandemic addressed critical gaps in equity, access, and digital readiness. The digital divide and insufficient digital capability lower the feasibility of online learning. But the study also shows that, through strategic leadership, teacher upskilling, and flexible pedagogical approaches, it is possible to enhance the accessibility and quality of higher education through digital means.

In the context of the interaction between students and institutions, the study by Santos (2019) provides empirical evidence that the most reliable technologies for academic communication are email and instant messaging. The utilization of student satisfaction at a higher level, according to the Technology Acceptance Model (TAM) and Expectation Confirmation Model (ECM). This demonstrates that efficient communication is a key foundation of digital transformation and that institutions must prioritize user-friendly, reliable technologies that meet academic needs.

In the local setting, the increased use of Information Systems in the Philippine education sector highlights institutions' ongoing efforts to improve their administrative operations through digitalization. The emergence of ICT and Management Information System (IMS) in HEIs and basic education settings provides numerous pieces of evidence of its effectiveness in managing data, enhancing processes, and strengthening transparency and excellence in institutional operations.

In the context of ICT and IMS adoption, various studies show that the systematic use of data and digital platforms strengthens an institution's capacity to manage students, employees, and operations. According to the study by Lopez and Lorejo (2023), administrators and teachers agreed that it aids in the development of learner management and in improving reporting. Even with challenges such as slow internet and an outdated manual, the system remains efficient due to the strong performance of the personnel who manage the data.

The contribution of digitalization to administrative excellence was further explored by Los Baños et al. (2023). The study adds that digital adoption in public schools in Bukidnon results in high administrative efficiency, including faster record-keeping, more efficient data retrieval, streamlined workflows, and much higher employee motivation to adopt digital tools. The use of digital technologies for student records, financial management, and reporting provides a huge aid in solving the long-standing problem of manual processes.

In higher education, an institution's digital readiness varies depending on its technical capabilities and organizational maturity. The study by Pullon et.al. (2025) found that some institutions remain at a moderate level of digital maturity, especially in governance, people readiness, and technology integration. Despite having foundational digital adoption, the need for interoperable platforms, standardized workflows, and robust training programs remains to achieve a higher level of digital transformation in administrative processes. The rapid advancement of digital technologies has driven higher education institutions (HEIs) to adopt integrated management information systems to improve administrative efficiency and service delivery. Prior studies, such as Grepon et al. (2021) and Grepon et al. (2025), demonstrate that centralized, integrated systems enhance data management, accessibility, and overall user satisfaction in HEIs. However, these studies primarily focus on system development and post-implementation evaluation, highlighting the need to examine organizational readiness and user acceptance before implementation, which this proposed study aims to address.

From another perspective on MIS in HEIs, Brombuela et al. (2021) found that MIS has a positive effect on teachers' work, including lecture preparation and administrative responsibilities. The learning management system (LMS) and library MIS were the most used, and the majority of teachers reported that they reduced their workload and expedited their processes. However, identified gaps remain, especially in data retrieval speed and technical support, highlighting the need to continue improving the system. In a broader policy perspective, the paper by Asio et al. (2022) introduces EMIS as a critical instrument for planning and designing education in a country. EMIS provides an accurate and timely dataset for monitoring the program allocation and resources. However, numerous challenges remain, including a lack of trained personnel, limited digital infrastructure, and problems with data quality and accessibility. The study suggested that effective implementation of EMIS requires strong training, sufficient human resources, and stakeholder collaboration in education. At the national level, Kataoka et al. (2022) explain that digital transformation is not optional but a necessity for achieving an efficient, equitable, and innovative higher education system. It is noted that the digital divide, digital skills gap, and the lack of interoperable platforms are significant hindrances to digitalization. The report created a blueprint for digital services architecture, which includes LMS, SIS, data platforms, and cybersecurity systems, which are needed to ensure a holistic and sustainable digital ecosystem in HEIs

The reviewed literature demonstrates that digital transformation in the HE sector goes beyond the acquisition of technology and involves a fundamental change in the organization’s structure, processes, and culture. From an international perspective, although most HEIs have begun their digital transition by implementing various information systems, very few have progressed to digital transformation, characterized by integration, interoperability, and data-driven decision-making. The studies are unanimous that technological advancements should be accompanied by good governance, visionary leadership, organizational preparedness, and capacity development of key stakeholders. Digital divide, inadequate infrastructure, the island of information, and a lack of digital literacy and skills are common problems at both international and local levels that impede HEIs' journey towards higher-order digital maturity. However, with increasing dependence on ICT and MIS and the potential of emerging technologies, there is significant potential for technology to improve administrative processes, service delivery, and informed decision-making in HEIs. The studies reviewed have demonstrated the urgency for HEIs to embrace a holistic, integrated, and strategic approach to digital transformation that ties technology investments to strategic objectives, enhances human and organizational capabilities, and ensures sustainable, inclusive digital transformation.

2. Methodology

2.1 Research Design

This study utilized a descriptive-evaluative research design to assess the current state of the NBSC-Integrated system and to assess the organizational readiness of Northern Bukidnon State College for the possible adoption of the Integrated Management Information System (IMIS). The design is appropriate, as the IMIS is not yet implemented at the time of the research; therefore, the focus is on the pre-implementation assessment rather than the new system's performance evaluation.

The quantitative approach used a structured survey questionnaire distributed to active users of the NBSC-Integrated System. The said method enables systematic data collection on user experience, accessibility, usability, technical issues, and the state of system support. The descriptive-evaluative approach provides an empirical baseline that can guide planning for the institution's digital transformation.

2.2 Respondents and Sampling Procedure

The respondents of the study are the faculty, administrative personnel, and other employees of Northern Bukidnon State College who actively use the NBSC-Integrated System. Overall, 100 respondents participated in the survey. The selection of respondents was limited to actual users to ensure that the data presented reflects the real experience of using the system. The total population of active NBSC-Integrated System users was approximately 135; sample adequacy was determined using Slovin's Formula with a 95% confidence level and 5% margin of error.

Formula: $$n = \frac{N}{1 + Ne^2}$$

Thus, a minimum of 101 respondents is recommended. The study's 100 respondents closely approximate the required sample size and remain acceptable for representativeness within the institution.

Purposive sampling was used, as the aim of the study is to gather data from employees with direct exposure to and experience with the NBSC-Integrated System. Inactive users were excluded because they cannot provide reliable information on the system's usability and readiness.

Inclusion Criteria: (1) faculty or administrative personnel of NBSC, (2) active users of NBSC-Integrated System within the day-frame of not less than one month, and (3) employees who voluntarily join the survey.

Exclusion Criteria: (1) new employees who have not yet used the system, and (2) respondents who didn't finish or accept the informed consent.

2.3 Research Instrument

The primary instrument for data collection is a structured survey questionnaire designed to examine the experience of users of the existing NBSC-Integrated System and to assess the institution's organizational readiness for IMIS. The questionnaire was divided into four (4) parts:

1. Section A–Demographic Profile: affiliation, age, gender, years of service, and frequency of using the system.
2. Section B–System Accessibility and Usability: accessibility of the system, user-friendliness, and experienced technical issues.
3. Section C–System Features and Functionality: usage of existing modules, reliability of the system, and how appropriate the system is for the tasks of the respondent.
4. Section D–Support and Training: state of technical support, responsiveness, and experienced orientation or training that is related to the system.

The questions utilized a Likert scale and multiple-choice format to obtain quantitative data. The open-ended feedback was used solely to support and deepen the interpretation of the quantitative results. Training readiness was operationalized using participation frequency and exposure to formal system orientation. Responses were transformed into proportional scores to reflect actual exposure to training opportunities. Unlike the other constructs measured using Likert scales, training represents institutional availability and participation rather than perception-based agreement.

2.4 Validity and Reliability

To ensure content validity, the survey questionnaire was reviewed by experts in information systems and administrative processes. Their suggestions were integrated into the final version of the instrument.

The instrument's reliability was ensured through item consistency and the use of standard Likert-scale measures. The instrument is intended only for the constructs that were actually used and analyzed in the study, to prevent methodological inconsistency.

Table 1. Reliability analysis using Cronbach's alpha.

Construct	Cronbach's Alpha	Interpretation
1. System Accessibility and Usability	0.914	Excellent Reliability
2. System Features and Functionality (*Satisfaction, including Support and Feedback*)	0.899	Good Reliability

Reliability testing was conducted using Cronbach's Alpha to determine the internal consistency of the constructs. Results showed acceptable to excellent reliability across all variables, indicating that the questionnaire items consistently measured their intended constructs. The standardized method for obtaining and analyzing data enhances research rigor and provides a solid basis for interpreting results and formulating recommendations for the institution's upcoming digital transformation initiatives.

2.5 Data Gathering Procedure

Data were collected through a Google Forms survey administered to active users of the NBSC-Integrated System. Data collection was conducted within a specific timeframe, and all responses were automatically recorded by the digital platform.

Before the survey was implemented, respondents were informed of the study's aim, voluntary participation, and the principles of data privacy and confidentiality. No personal identifying information was included in the collected data. After the data collection, responses were organized and prepared for descriptive statistical analysis.

2.6 Data Analysis Techniques

This subsection explains the systematic process for analyzing data. The data were analyzed using descriptive statistics, reliability analysis, and multiple linear regression. The mean and standard deviation were computed to assess the user acceptance constructs. Cronbach's Alpha was used to evaluate internal consistency. Multiple linear regression was applied to determine the predictive influence of Effort Expectancy and Facilitating Conditions on user satisfaction.

2.7 Ethical Considerations

The study adhered to research ethics principles, including voluntary participation, informed consent, and data privacy. The respondents have the right to refuse or withdraw at any time, even as the study progresses. All data were treated confidentially and used solely for the aim of the study.

The study obtained institutional permission from Northern Bukidnon State College before proceeding with data collection to ensure compliance with institutional guidelines.

2.8 Research Rigor

To ensure credibility and consistency of results, the study utilized a validated instrument, clear inclusion criteria, and a systematic data analysis process. The focus on active users of the system provides realistic, reliable data on the NBSC Integrated System's state.

The standardized method for obtaining and analyzing data enhances research rigor and provides a solid basis for interpreting results and formulating recommendations for the institution's upcoming digital transformation initiatives.

3. Results

3.1 Demographic Profile of Respondents

The study included 100 respondents from the institution's faculty, administrative personnel, and other employees who are actively using the NBSC-Integrated System. In the respondents' affiliations presented in Figure 1, 31% are faculty, 64% are administrative personnel, and the remaining 5% are others. Long affiliation shows that the majority (55%) served the institution between 1-3 years, while 21% less than 1 year, 16% of them is 4-6 years, and 8% more than 6 years.

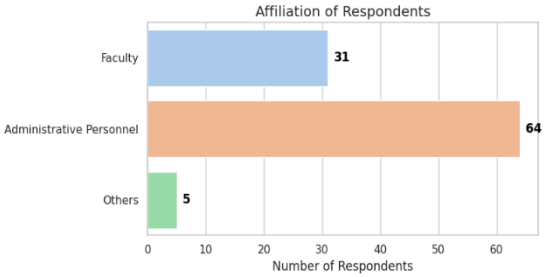

Figure 1. Affiliation of survey respondents to the institution.

In the gender distribution shown in Figure 3, 66% are female, 33% are male, and 1% did not disclose their gender. The majority of respondents are 25-34 years old (64%), followed by 35-44 (23%), 45-44 (8%), 18-24 (4%), and 55-64 (1%). In terms of frequency of use, the majority (91%) use it every day, while 9% use it weekly. As shown in Figure 5, no respondents answered monthly, rarely, or as a first-timer. The demographic profile provides a clear picture of the system's active users, which is important for assessing the institution's readiness for the IMIS.

3.2 System Accessibility and Usability

In the analysis of NBSC-Integrated System's accessibility and usability, respondents are requested to rate the system's accessibility, the user-friendliness of the user interface, and the experience with technical issues. The majority of respondents rate accessibility as Excellent (46%) and Good (47%), while some rate it as Fair (7%), as shown in Figure 2.

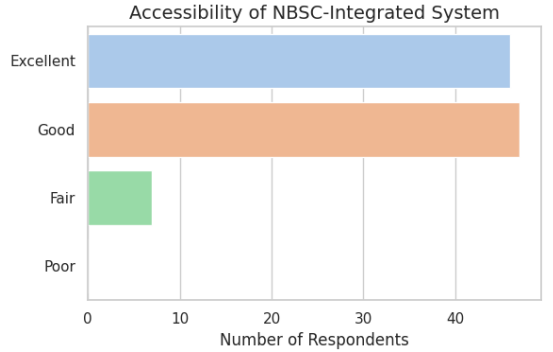

Figure 2. Accessibility of the NBSC-integrated system.

In terms of user-friendliness, as shown in Figure 3, the majority (87%) rated the system as easy to use (Very Easy + Easy), while 11% were neutral, and 2% experienced difficulty using it.

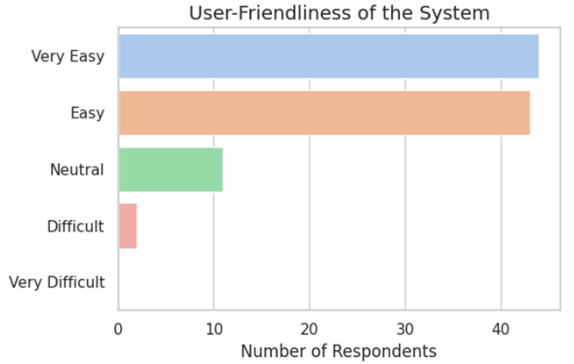

Figure 3. User-friendliness of the NBSC-integrated system.

Figure 4 presents the technical issues, most of which experienced occasional problems (48%), while 43% rarely, 7% never, and 2% frequently. The most common issues are system downtime (64%), slow performance (35%), and login problems (9%) as presented in Figure 5. The result proved that while the system is generally accessible and user-friendly, some technical limitations need to be solved to expedite the transition of IMIS.

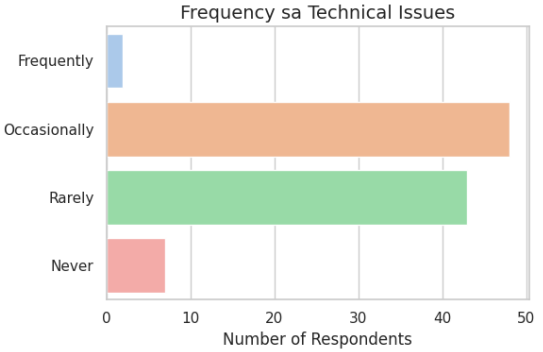

Figure 4. Frequency of technical issues in using the NBSC-integrated system.

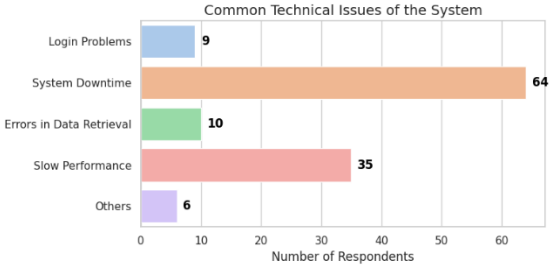

Figure 5. Common technical issues of the NBSC-integrated system.

The findings in accessibility and usability provide a foundation for the pre-implementation assessment, especially in planning and training, technical support, and system optimization for IMIS adoption.

3.3 System Features and Functionality

The NBSC-Integrated System comprises numerous modules that support the institution's administrative and academic functions. Figure 6 presents all NBSC-Integrated Systems modules, and based on the survey results, the most utilized module is the Output Rating Sheets (ORS), which was used by 100% of respondents. This is followed by Personal Data Sheet (67%), Document Tracking (59%), and Issuances (52%). The least-used modules include the Recruitment Portal (2%), Billing Portal (5%), and Admission Portal (6%), indicating a lack of awareness and training.

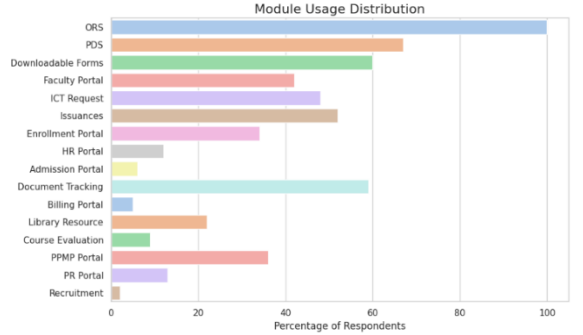

Figure 6. NBSC-integrated system module usage distribution.

In the system's accuracy presented in Figure 7, the majority of high-use modules, such as the ORS, DTR, Issuances, and ICT Request Module, received ratings of 4 and 5, which indicates most users experienced reliability in the system and, together with it, is a good performance in processing information. However, some low-usage modules, such as the Billing Portal, Recruitment Portal, and Admission Portal, receive lower ratings, highlighting insufficient functionality or user experience.

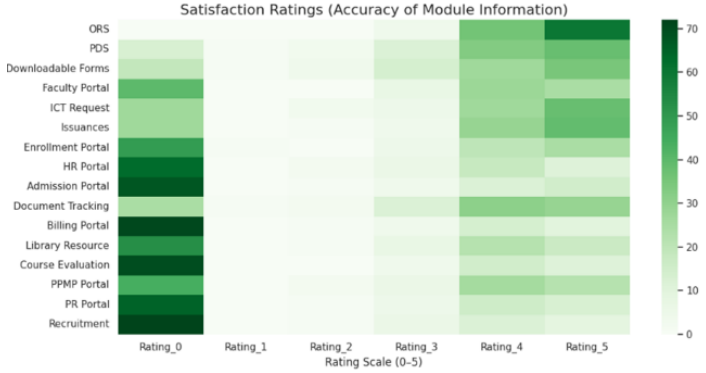

Figure 7. Satisfaction ratings of NBSC-integrated system modules (accuracy of module information).

While it was rated “system meeting work needs”, it was identified that the frequently used modules, such as ORS, Issuances, ICT Requests, and Document Tracking System, presented a high alignment with the work of employees. But modules such as Admission, Billing, and Recruitment Portals are not very useful. Figure 8 presents the heatmap for “System Working Needs” ratings.

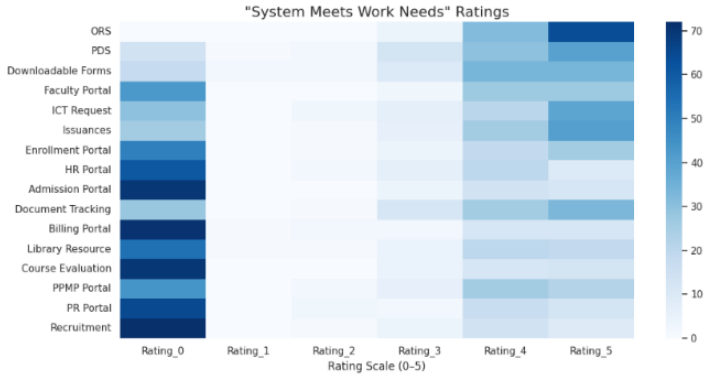

Figure 8. Heatmap for system working needs of NBSC-integrated system modules.

The collective result emphasizes that the NBSC-Integrated System is effective on some core transactions but has variability in module relevance, system accuracy, and functional dependability. This helps in identifying which modules need to be prioritized in upgrading or aligning to shift into a more advanced Integrated Management Information System (IMIS)

3.4 Measuring System Readiness and User Acceptance

Measuring the usefulness (*Performance Expectancy*) and ease of use (*Effort Expectancy*) are two of the most important baselines for identifying how ready users are to adopt new technology. The survey results show the following mean scores on 5-point Likert scales (where 5 represents the highest). The name of the construct, mean, standard deviation, and its interpretation were presented in Table 2.

Table 2. Mean, standard deviation, and interpretation of usefulness and ease of use construct.

Construct	Mean	Standard Deviation	Interpretation
Usefulness	4.30	0.59	High Acceptance
Ease of Use	4.31	0.68	High Acceptance

The existing system obtained a high mean score of 4.30. This highlights that NBSC users are satisfied with the information's accuracy and its ability to address their needs related to academic or administrative tasks. Therefore, the institution currently has only a small functional gap. The high standard deviation (0.59) indicates slightly different opinions, but the overall acceptance is positive.

Similarly, the mean ease-of-use score is 4.31. This shows that the system is viewed as simple to use and easy to access by the respondents. This result means that users have a high standard of technology usability.

3.5 Facilitating Conditions

The facilitating condition determines an organization's readiness to support a technology. This was measured through Technical Support, Responsiveness, and Training. Table 3 shows the result, highlighting a huge discrepancy or differences in the level of readiness:

Table 3. Mean, standard deviation, and interpretation of facilitating conditions.

Construct	Mean	Standard Deviation	Interpretation
Technical Support	4.46	0.76	Very Strong
Responsiveness	4.60	0.84	Very Strong
Training	0.63	0.49	Low Exposure

The components of technical support (Mean: 4.46) and responsiveness (Mean: 4.60) received higher ratings across the survey. This means that ICTMO is quick and effective at solving problems as they arise (reactively). This indicates high technical readiness among personnel.

Training surprisingly obtains a low mean score of 0.63. This highlights the inadequacy of the training or orientation provided to system users. Regardless of how good the system may be or how reactive the IT staff is, the training gap is the lowest score in the whole survey and represents a critical gap in Human Resources and Operational Readiness for the institution. If there is insufficient training, adopting the new IMIS carries the risk of failure. Training readiness was operationalized using participation frequency and exposure to formal system orientation. Responses were transformed into proportional scores to reflect actual exposure to training opportunities. Unlike the other constructs measured using Likert scales, training represents institutional availability and participation rather than perception-based agreement.

The critically low training score reflects a broader issue across public higher education institutions in the Philippines, where digital transformation initiatives are often technology-driven but lack sufficient capacity-building programs. Similar findings in prior studies emphasize that many institutions invest in digital systems without establishing structured onboarding, digital literacy programs, or continuous user orientation.

This gap suggests that readiness is not solely a matter of technical infrastructure but also of institutional preparedness in workforce development. Public HEIs frequently face staffing limitations, insufficient digital competency frameworks, and fragmented implementation strategies. Thus, training should not be treated as a secondary support mechanism but rather as a central pillar of digital transformation readiness.

For academic leaders and quality assurance offices, the findings imply that readiness assessments should include structured indicators of capability-building alongside system performance metrics.

3.6 Implications of Factors Driving Satisfaction

This section discusses the effects of Effort Expectancy and Facilitating Conditions on users' functional satisfaction (represented by the Needs Met Score). To determine which factor (EE or FC) is most important in driving user functional satisfaction, we conducted a multiple linear regression analysis. The dependent variable (DV) is the Needs Met Score (a proxy for usefulness/acceptance), and the independent variables (IVs) are the EE and FC scores. The regression model shows that, in general, it is statistically significant (Prob(F-statistic) = 4.70e-07, $p < 0.001$). The R-squared of 0.259 indicates that EE and FC, when combined, explain 25.9% of the variation in the system's functional satisfaction. The mathematical equation of the model (unstandardized coefficients) is:

$$Need\ Met\ Score = 2.1475+0.2820(EE)+0.2498(FC)+\epsilon$$

where ϵ represents the error term.

The analysis of the coefficient will show which is the real driver of satisfaction. The EE significantly influences the Needs Met Score ($\beta = 0.2820$, $p = 0.003$). This means that if the system's ease improves by 1 unit, the users' functional satisfaction will increase to 0.2820 units.

The effect of the FC score is also significantly influenced by the Needs Met Score ($\beta = 0.2498$, $p = 0.016$). Standardized beta coefficients were also examined to compare the relative predictive strength of variables. This is the most important finding. The coefficient β of FC is higher than that of EE. This highlights that each 1-unit improvement in Facilitating Conditions can provide 0.2948 units of improvement in functional satisfaction.

Overall, despite the importance of ease of use (EE), the Facilitating Conditions (FC) are the most powerful predictors of user satisfaction. Due to the result of EE (4.31), which is already high, and FC score (3.23), low (result of training gap), the huge leverage that NBSC can obtain to increase their user acceptance in IMIS is giving a solution to the FC gap, especially in training.

Its descriptive-evaluative design and institution-specific context limit this study. Regression analysis provides predictive insights but does not fully model latent construct relationships. Future studies may use CFA or SEM for more robust validation. While TAM and UTAUT commonly utilize Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) to validate latent constructs and assess model fit, the present study adopted a descriptive-evaluative design intended primarily for baseline readiness assessment rather than predictive behavioral

modeling. Multiple linear regression was selected to examine relationships among observed variables and to identify practical institutional predictors of readiness.

The absence of CFA or SEM constitutes a methodological limitation, as latent-variable measurement error and model fit indices were not assessed. However, the use of reliability testing and construct-level internal consistency reporting partially strengthens confidence in the measured constructs. Future studies are encouraged to employ CFA or Partial Least Squares Structural Equation Modeling (PLS-SEM) to confirm construct validity, assess mediating relationships, and develop a more robust theoretical model of digital transformation readiness in higher education institutions.

Future studies may use CFA or PLS-SEM after IMIS implementation to further validate the study constructs and examine the relationships among readiness, user acceptance, and system adoption. These methods can provide stronger statistical validation and a deeper understanding of how organizational and technological factors influence digital transformation in higher education institutions. Additionally, post-implementation studies may be conducted to compare readiness findings with actual system adoption outcomes over time.

4. Discussion

The findings of this study support the core assumptions of the Technology Acceptance Model (TAM) proposed by Fred Davis, which emphasizes that perceived ease of use significantly influences user acceptance and satisfaction toward information systems. The significant effect of Effort Expectancy suggests that users are more likely to perceive the Integrated Management Information System (IMIS) positively when it is easy to understand and use. This finding aligns with previous studies indicating that ease of use contributes to higher user satisfaction and system adoption in educational and organizational environments.

The results also support the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Marikyan & Papagiannidis (2026), particularly regarding the role of Facilitating Conditions in technology adoption. The stronger predictive influence of FC indicates that institutional support mechanisms, including training programs, technical assistance, and infrastructure readiness, are essential in improving user acceptance. This finding is consistent with studies showing that organizations with strong facilitating conditions achieve better technology adoption outcomes because users feel more supported and confident in utilizing digital systems.

The comparatively lower FC mean score (M = 3.23) highlights an existing training and support gap within Northern Bukidnon State College. Although users generally perceive the IMIS as easy to use, insufficient training and limited institutional support may hinder full system utilization and long-term acceptance. This observation supports the findings of Marler and Boudreau (2017), who argued that organizational support and human resource readiness are critical components of successful digital transformation initiatives. Similarly, Stone et al. (2015) emphasized

that user training and organizational readiness significantly influence employee acceptance of digital HR and management systems.

The findings also imply that digital transformation initiatives in higher education institutions require more than technically functional systems. Institutions must invest in continuous capability-building programs, structured orientation activities, and responsive technical support to strengthen user readiness and engagement. In this study, the relatively high EE score suggests that usability concerns have already been addressed to some extent; however, improving facilitating conditions may offer the greatest opportunity to increase overall readiness and user acceptance of the IMIS.

These findings contribute to the growing literature on digital transformation readiness in higher education by demonstrating that institutional support mechanisms may exert stronger influence than usability factors alone. The study therefore reinforces the importance of combining technological readiness with organizational preparedness in implementing large-scale information systems in academic institutions.

5. Conclusion

This study examined the organizational readiness of Northern Bukidnon State College (NBSC) for the potential implementation of an Integrated Management Information System (IMIS) by assessing user experiences with the existing NBSC-Integrated System. The findings reveal that the institution has a strong technological foundation, characterized by high perceived usefulness, ease of use, and responsive technical support. These results suggest that employees are generally receptive to digital systems and that the institution has already established a favorable environment for technology adoption.

However, despite these strengths, the study identified a significant limitation in the area of structured training and user orientation. The findings indicate that while technical infrastructure and system usability are already well-established, organizational readiness remains incomplete without sufficient human capacity development. The lack of formalized training reflects a gap in operational preparedness that may hinder the successful adoption of a more complex and institution-wide integrated system.

The regression analysis further emphasizes that facilitating conditions, particularly user support and training-related mechanisms, significantly influence user satisfaction and system acceptance. This suggests that readiness for digital transformation extends beyond technological availability and depends heavily on institutional support structures that empower users to adapt to system changes effectively.

Overall, NBSC demonstrates partial readiness for IMIS adoption. The institution exhibits strong technical and usability readiness but requires enhanced workforce preparation, structured onboarding, and continuous capability-building initiatives to ensure successful implementation. These findings contribute to the growing body of

literature on digital transformation readiness in public higher education institutions by highlighting that sustainable system adoption requires balanced investment in both technology and human readiness.

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Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the conduct, analysis, and publication of this study. Although the respondents were faculty and administrative personnel of Northern Bukidnon State College, all data were collected, processed, and analyzed with strict adherence to ethical standards to ensure objectivity and impartiality. The researchers affirm that no financial, professional, or personal relationships have influenced the results and interpretations presented in this study.

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