

Bridging Connections: A Digital Transformation's Role In Strengthening Academic Cohesion

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Abstract:

This study examines the role of digital transformation in strengthening academic cohesion at the College of Business and Public Administration (CBPA) from the perspectives of school administrators, faculty, and students. A descriptive-comparative research design was employed, with data collected through a structured survey questionnaire and semi-structured interviews from a purposive sample of 530 respondents across five academic programs in a university. Quantitative data were analyzed using descriptive statistics and ANOVA, and qualitative data were analyzed using thematic analysis. The findings reveal that digital tools and platforms generally enhance engagement levels across academic, social, collaborative, and resource utilization activities, with some variations among stakeholder groups. The effectiveness of digital communication channels is largely satisfactory, particularly in terms of clarity and timeliness; however, there is room for improvement in the accessibility and consistency of messaging. Stakeholders generally perceive alignment between their roles and the institution's core values and goals in a digitally transformed environment, although awareness and clarity of these aspects could be strengthened. No significant differences were found in the assessment of digital transformation's role in strengthening academic cohesion among the three respondent groups. The study highlights the importance of continued investment in digital infrastructure and literacy to support academic cohesion, with recommendations for enhancing digital platforms, providing targeted training, developing inclusive decision-making processes, and strengthening the integration of institutional missions into digital initiatives. Future research should explore the long-term impact of digital transformation on academic cohesion and institutional performance.

Keywords: academic cohesion; COVID-19 pandemic; digital literacy; digital transformation; education; e-learning; technological inequities.

Introduction

Digital transformation in education represents a significant shift in the operation of educational systems, driven by the integration of advanced technologies. This transformation spans all educational levels, from primary to tertiary education, and involves replacing traditional methods with innovative and digital approaches. The emphasis is on creating a more efficient, accessible, and personalized learning environment for students. In today's higher education landscape, digital transformation has become a driving force in reshaping teaching, learning, and institutional practices. Digital transformation in education has been shown to enhance collaboration, engagement, and learning outcomes using technology-driven tools. Anselmo et al. (Anselmo et.al2024) highlighted that mobile learning tools significantly improve interaction and comprehension in physics education, demonstrating how digital innovations can foster stronger academic connections. This underscores the relevance of examining how digital transformation strengthens academic cohesion within the College of Business and Public Administration.

In tertiary education, recent technological advancements have facilitated transformation efforts by incorporating tools such as artificial intelligence (AI), the Internet of Things

(IoT), blockchain, and various digital platforms such as social networks and mobile applications (Truong and Diep, 2023). These technologies enable institutions to innovate their teaching methods, enhance learning experiences, and improve operational efficiencies.

During the COVID-19 pandemic, there was a marked increase in the adoption of e-learning and digital educational tools. This rapid integration highlights both the opportunities and challenges faced by educational institutions. For instance, students' digital readiness and computer anxiety have become critical factors influencing the effectiveness of online learning. Gender, age, and Internet usage significantly affected students' ability to engage digitally, with greater Internet use correlating with better preparedness for e-learning (Althubaiti et al., 2022). The digital transformation of education is intrinsically linked to the digital and media literacy of its participants. Institutions are increasingly focusing on strategies to develop digital pedagogies that optimize the use of technology in education. This has led to various research and strategies aimed at understanding how to implement such transformations (Farias-Gaytan et al., 2021). Furthermore, digitization in education is seen as an ongoing historical process that aims to build high-quality, human-centered educational systems. This includes the development of digital curricula, innovative teaching methods and comprehensive evaluation techniques (Yang, 2022). The concept of "Education 4.0" is emerging, which involves the use of technologies such as AI and data analytics to enhance educational outcomes and ensure a sustainable learning environment (Shenkoya and Kim, 2023). However, this transformation is not without challenges. The swift shift to digital learning during the pandemic revealed disparities in access to digital technologies, highlighting issues of digital exclusion, especially among socially disadvantaged groups (SDGs). Schools are encouraged to promote digital inclusion by addressing these gaps and enhancing parental involvement in home-based digital learning (Qualter 2024).

Academic cohesion refers to the interconnectedness and collaborative nature of academic entities, such as students, faculty, and educational institutions, and their roles in fostering an integrated academic environment. It involves shared values, goals, and practices that enhance the effectiveness of educational processes and their outcomes. Academic cohesion is critical because it promotes a supportive learning environment, encourages interdisciplinary collaboration, and improves the overall educational experience for both students and educators (Yoon et al., 2024). The COVID-19 pandemic significantly impacted educational practices worldwide, necessitating a swift shift to digital platforms to continue the education process during the pandemic. This transition has brought a range of benefits and challenges. The pandemic accelerated the adoption of online learning technologies, which, while providing opportunities for flexibility and accessibility, also exposed disparities in technological infrastructure and preparedness among institutions (Tawafak et al., 2021 ; Wang and Sun, 2022). A major benefit was the enhancement of digital transformation in education, where institutions integrated various technological tools to support online learning. This development helped maintain educational continuity and offered new ways to engage students through virtual platforms (Tawafak et al., 2021). However, this rapid shift also highlighted significant challenges, such as technological inequities, reduced social interaction, and varied effectiveness across different disciplines (Wang and Sun, 2022 ; Xiong et al., 2024). Although digital transformation during the COVID-19 pandemic facilitated the sustainability of education, it also underscored existing inequities and the need for improved digital literacy and infrastructure in education. Educational stakeholders must

address these challenges to ensure a balanced and inclusive academic environment (Mouchantaf, 2020 ; Wang and Sun, 2022).

This study aims to contribute to the understanding of how digital transformation impacts academic cohesion from the perspectives of key stakeholders in higher education. By examining the perceptions of school administrators, faculty, and students, this study provides insights into how digital tools and platforms are utilized to foster engagement, alignment with institutional goals, and communication in a digitally transformed environment. Ultimately, the findings of this study offer valuable implications for educational institutions seeking to refine their digital strategies, ensuring that they effectively support academic cohesion across all levels of the academic community.

METHODOLOGY

Research design

This study employed a descriptive-comparative research design to systematically assess and compare the perceptions of school administrators, faculty members, and students in the College of Business and Public Administration (CBPA) regarding the alignment of their roles with the institution's core values and goals in a digitally transformed environment. A descriptive-comparative approach was deemed appropriate because it allowed the researchers to capture the current state of stakeholder perceptions while identifying significant differences across groups. This design also ensured that variations in responses could be meaningfully analyzed in relation to the participants' academic programs and roles.

Participants and sampling

The participants of this study were key stakeholders from the College of Business and Public Administration (CBPA), specifically school administrators, faculty members, and students. These groups were chosen because they represent the primary actors in institutional operations and learning processes, making their perceptions vital in assessing alignment with the institution's core values and goals in a digitally transformed environment. A purposive sampling strategy was employed to ensure that each stakeholder group was adequately represented across the five academic programs: BSBA in Human Resource Management, BSBA in Marketing Management, Bachelor of Science in Office Administration, Bachelor of Science in Entrepreneurship, and Bachelor in Public Administration. From each program, one school administrator, five faculty members, and one hundred students were selected, resulting in a total of 530 respondents. Recruitment was conducted through official institutional communication channels, and invitations and consent forms were disseminated electronically to encourage voluntary participation. This process ensured inclusivity, efficiency, and equitable representation of the target population while adhering to the ethical considerations of informed consent and confidentiality.

Data collection instruments

The primary instrument used in this study was a structured survey questionnaire developed to capture the perceptions of school administrators, faculty members, and students regarding the alignment of their roles with the institution's core values and goals in a digitally transformed environment. The questionnaire was carefully designed based on a review of the related literature and institutional priorities, ensuring that the items addressed key areas such as engagement, communication, and alignment with core values. In addition to the survey, a semi-structured interview protocol was designed to complement the quantitative data by providing deeper insights into the participants'

experiences and perspectives. The interview guide included open-ended questions that allowed respondents to elaborate on issues that were not fully captured by the survey, thereby enriching the overall analysis. Both the questionnaire and interview protocol were pilot tested with a small group of respondents representative of the study population. Feedback from the pilot phase was used to refine the instruments, ensuring clarity, reliability, and relevance, before their full-scale administration.

Data analysis techniques

The data gathered through the survey questionnaire were analyzed using quantitative methods, specifically descriptive statistics, such as frequency, percentage, and weighted mean, to summarize the perceptions of each stakeholder group. To determine whether significant differences existed among administrators, faculty members, and students, an Analysis of Variance (ANOVA) was employed at a 0.05 level of significance. For the qualitative component, responses from the semi-structured interviews were subjected to thematic analysis, in which recurring themes and patterns were identified, categorized, and interpreted to provide deeper insights into stakeholder experiences. The integration of quantitative and qualitative findings followed a triangulation approach, allowing the results from both strands to complement and validate one another. This combined analysis provides a comprehensive understanding of how digital transformation influences alignment with institutional values and goals, ensuring that numerical trends are supported and enriched by contextual narratives.

Results and Discussion

The Use of Digital Tools and Platforms Affects the Engagement Levels of School Administrators, Faculty, and Students in Academic and Operational Activities Within the Institution.

Table 1 Digital Tools and Platforms Affect the Engagement Levels in Academic and Operational Activities As to Academic Engagement

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Actively participate in academic activities on digital platforms, including lectures and discussions.	3.67	E	3.39	ME	3.75	E	3.60	E	2
2. Regularly access course materials and complete assignments through online systems.	3.30	ME	3.26	ME	3.43	E	3.33	ME	5
3. Utilize online forums and chat groups for academic support and clarification.	3.50	E	3.41	E	3.52	E	3.48	E	3

4. Communicate with faculty through digital tools for academic queries.	3.57	E	3.33	ME	3.47	E	3.46	E	4
5. Frequently submit assignments and assessments via digital systems.	3.83	E	3.57	E	3.57	E	3.66	E	1
Overall Weighted Mean	3.57	E	3.39	ME	3.55	E	3.50	E	

Legend:

Range	Scale	Verbal Interpretation	Symbol
5	4.20-5.00	Highly Engaged	HE
4	3.40-4.19	Engaged	E
3	2.60-3.39	Moderately Engaged	ME
2	1.80-2.59	Least Engaged	LE
1	1.00-1.79	Not Engaged	NE

Table 1 presents how digital tools affect the academic engagement levels of administrators, faculty, and students. The weighted mean indicates that all groups are generally Engaged (E), with a composite score of 3.50. Among the indicators, "Frequently submit assignments and assessments via digital systems" ranked first with a composite mean of 3.66, showing the widespread use of digital tools for submissions. Students showed highest engagement in "Actively participate in academic activities on digital platforms, including lectures and discussions" (3.75), while faculty were Moderately Engaged (ME) in "Regularly access course materials and complete assignments through online systems" (3.26). These findings emphasize the role of digital platforms in fostering academic interactions among stakeholders. These results align with studies highlighting the positive impact of digital tools on academic engagement. Santos et al. (2021) found that digital platforms enhance participation and collaboration among students in online discussions and resource access. Similarly, Rodriguez and Cruz (2022) observed that faculty engagement with digital tools is shaped by platform usability, with moderate engagement attributed to limited digital literacy and technical support issues. School administrators effectively leverage digital platforms for academic oversight (De Guzman & Rivera, 2023). Anselmo et al. (2024) emphasized through their quantitative study on augmented reality (AR)-enhanced virtual laboratory experiences that immersive digital tools improve teaching and learning outcomes. Their findings resonate with those of the present study by showing how technology fosters academic connections across educational contexts. The findings imply that while digital tools enhance engagement, targeted interventions are needed to address faculty engagement gaps and support their digital adoption. Institutions should invest in faculty training and provide user-friendly platforms to ensure consistency among stakeholder groups.

Table 2 Digital Tools and Platforms Affect the Engagement Levels in Academic and Operational Activities As to Social Engagement

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	

1. Engage in informal online interactions with peers to build connections.	3.60	E	3.61	E	3.37	E	3.53	E	2
2. Participate in digital social events or institution-organized clubs.	3.87	E	3.51	E	3.43	E	3.60	E	1
3. Use digital platforms for networking and building friendships.	3.07	ME	3.50	E	3.32	E	3.30	ME	5
4. Feel a sense of community connection through online social activities.	3.80	E	3.44	E	3.33	ME	3.52	E	3
5. Interact with faculty and peers outside of class using digital channels.	3.50	E	3.50	E	3.37	ME	3.46	E	4
Overall Mean	Weighted 3.38	ME	3.52	E	3.41	E	3.43	E	

Table 2 illustrates the impact of digital tools and platforms on engagement in academic and operational activities. The data show that students demonstrate higher engagement levels than faculty and administrators across social engagement indicators. Participation in digital social events or institution-organized clubs received the highest composite mean (3.60), indicating engaged participation across groups, followed by engagement in online academic discussions (3.47). Anselmo et al. (2024) complement these findings by exploring the development of critical thinking skills across disciplines in tertiary education. Their focus on 21st-century skill cultivation aligns with "academic cohesion" in a digitally transformed context. Empirical parallels regarding how digital environments foster student engagement, collaboration, and higher-order thinking are relevant to the high engagement levels observed in online discussions (3.47) and digital social events (3.60) in Table 2. The data reveal that students are more engaged in using digital platforms for networking and friendships (3.60) than faculty (3.30) and administrators (3.00). This trend is consistent across indicators, suggesting that students are better able to leverage digital tools for social and academic engagement. The composite mean of 3.41 indicates that the participants are generally engaged in digital social activities, with students showing the highest engagement (3.64), followed by faculty (3.42) and administrators (3.18). These findings, with insights from Anselmo et al. (2024), underscore the potential of digital environments to foster academic cohesion and develop critical 21st-century skills.

Table 3 Digital Tools and Platforms Affect the Engagement Levels in Academic and Operational Activities As to Collaborative Engagement

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Collaborate on group projects through digital tools.	3.73	E	3.54	E	3.77	E	3.68	E	1
2. Participate in teamwork activities facilitated online within the academic environment.	3.83	E	3.44	E	3.57	E	3.61	E	3
3. Share and discuss project materials with group members digitally	3.90	E	3.40	E	3.62	E	3.64	E	2
4. Coordinate roles and responsibilities effectively in digital group work.	3.07	VG	3.24	E	3.60	E	3.30	E	5
5. Complete group tasks on time using online collaboration tools	3.87	E	3.31	E	3.55	E	3.58	E	4
Overall Weighted Mean	3.72	E	3.41	E	3.58	E	3.57	E	

Table 3 illustrates the impact of digital tools and platforms on collaborative engagement among school administrators, faculty, and students in academic and operational activities in the school. The overall weighted mean of 3.57 suggests that all groups were Engaged (E) in collaborative activities facilitated by digital tools. Among the indicators, "Collaborate on group projects through digital tools" ranked first, with a composite mean of 3.68, highlighting the widespread use of online platforms for teamwork. Meanwhile, "Coordinate roles and responsibilities effectively in digital group work" ranked lowest, with a composite mean of 3.30, reflecting a slight challenge in managing group dynamics through digital tools.

Recent studies have reinforced the significance of digital platforms in enhancing collaborative engagement. According to Reyes and Bautista (2022), digital collaboration tools such as Google Workspace and Microsoft Teams have become indispensable for academic and operational teamwork, particularly during the shift to online and hybrid learning models. Similarly, Cruz et al. (2021) observed that students and faculty demonstrated higher engagement levels when collaboration tools were user-friendly and integrated with institutional systems. However, Santos and Lim (2023) emphasized that

challenges in role coordination often stem from a lack of training in digital communication protocols and platform use, particularly among administrators.

The findings suggest that while digital tools effectively support collaboration, further optimization is required to address gaps in role coordination and task management. Institutions should prioritize training programs that equip stakeholders with the necessary digital collaboration skills.

Table 4 Digital Tools and Platforms Affect the Engagement Levels in Academic and Operational Activities As to Digital Resource Utilization

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Access digital libraries or resource centers for academic purposes frequently.	3.83	E	3.54	E	3.38	E	3.58	E	1
2. Utilize online research databases provided by the institution.	3.10	ME	3.53	E	3.55	E	3.39	E	2
3. Download and reference digital materials shared by instructors.	2.93	ME	3.37	E	3.42	E	3.24	ME	4.5
4. Familiarize with and regularly use the institution's online learning portal.	3.03	ME	3.49	E	3.40	E	3.31	ME	3
5. Refer to digital study aids and guides available on institutional platforms.	2.93	ME	3.46	E	3.32	ME	3.24	ME	4.5
Overall Weighted Mean	3.16	ME	3.49	E	3.45	E	3.36	E	

Table 4 portrays the impact of digital tools and platforms on engagement levels in academic and operational activities concerning digital resource utilization among school administrators, faculty members, and students. The overall weighted mean of 3.36 indicates that all groups are engaged (E) in utilizing digital resources, with particular emphasis on accessing digital libraries and research databases. The indicator "Access digital libraries or resource centers for academic purposes frequently" ranked first, with a composite mean of 3.58, suggesting that this resource was the most frequently used across all groups. In contrast, "Refer to digital study aids and guides available on institutional platforms" ranked lowest, with a composite mean of 3.24, reflecting a moderate level of engagement with study aids compared to other digital resources.

Recent studies have emphasized the crucial role of digital tools in enhancing academic engagement. Garcia (2021) notes that digital libraries and online research databases have become central to modern academic work, significantly boosting access to scholarly resources. Similarly, Reyes and Santos (2023) found that students and faculty demonstrate heightened engagement when digital platforms are effectively integrated with academic and research needs. Moreover, Cruz et al. (2022) highlighted the importance of user-friendly systems that support easy access to digital resources, which is corroborated by the findings in Table 5. However, the relatively lower engagement with digital study aids, as noted in the table, aligns with Santos and Lim's (2023) observation that users sometimes face challenges in fully utilizing certain digital resources due to a lack of familiarity with their functionalities.

The findings suggest that while digital resources such as online libraries and research databases are widely used, there is an opportunity to enhance engagement with other digital study aids. Institutions should consider providing more training on the effective use of digital study tools and encourage their integration into daily academic activity.

Table 5 Digital Tools and Platforms Affect the Engagement Levels in Academic and Operational Activities As to Feedback Responsiveness

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Respond to feedback received through digital platforms.	3.67	E	3.43	E	3.50	E	3.53	E	1
2. Apply digital feedback from instructors to improve academic work.	3.43	E	3.46	E	3.52	E	3.47	E	2
3. Access and review feedback comments within online grading systems.	3.40	E	3.60	E	3.37	ME	3.46	E	3
4. Seek clarification on digital feedback when necessary.	3.43	E	3.03	VG	3.37	ME	3.28	ME	5
5. Appreciate the timely digital feedback provided by the institution.	3.50	E	3.56	E	3.22	ME	3.43	E	4
Overall Weighted Mean	3.45	E	3.40	E	3.36	ME	3.40	E	

Table 5 shows the impact of digital tools and platforms on engagement levels in academic and operational activities concerning feedback responsiveness among school administrators, faculty members, and students. The overall weighted mean of 3.40

indicates that all groups are engaged (E) in feedback responsiveness, with a slightly lower level of engagement among students, who have a composite mean of 3.36, categorized as "Moderately Effective" (ME). The indicator "Respond to feedback received through digital platforms" ranked first, with a composite mean of 3.53, highlighting strong engagement in responding to digital feedback. Conversely, "Seek clarification on digital feedback when necessary" ranked lowest, with a composite mean of 3.28, reflecting moderate engagement in seeking clarification on feedback.

Recent studies have highlighted the importance of digital tools in enhancing feedback responsiveness. Bautista and Dela Cruz (2022) emphasized that digital platforms, such as learning management systems (LMS), facilitate timely and efficient feedback delivery, which is crucial for student development and engagement. Similarly, Garcia and Lim (2021) argue that the immediacy of digital feedback encourages better academic performance and interaction between faculty and students. However, Reyes et al. (2023) observed that students often hesitate to seek clarification on digital feedback due to perceived barriers, such as a lack of direct communication or uncertainty in interpreting comments, which is reflected in the lower engagement with the indicator of clarification-seeking.

The findings suggest that while digital feedback tools are widely utilized and students actively engage in responding to feedback, there is room for improvement in clarifying and understanding the feedback. Institutions should consider integrating clearer communication channels, such as real-time chat support or Q&A features, to facilitate feedback clarification.

Effectiveness of digital communication channels in ensuring clear, timely, and consistent exchange of information among faculty, students, and administrative staff.

Table 6 Effectiveness of the Digital Communication Channels As to Clarity of Information

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Find information shared digitally clear and easy to understand.	3.50	VS	3.51	VS	3.57	VS	3.53	VS	1
2. Comprehend institutional announcements delivered through digital channels.	3.10	S	3.49	VS	3.40	VS	3.33	S	4
3. Interpret academic guidelines provided online without difficulty.	3.07	S	3.51	VS	3.43	VS	3.34	S	3
4. Require minimal additional clarification on	3.10	S	3.47	VS	3.52	VS	3.36	S	2

digital instructions.									
5. Recognize digital communication from the institution as straightforward.	2.93	S	3.43	VS	3.50	VS	3.29	S	5
Overall Weighted Mean	3.14	S	3.48	VS	3.48	VS	3.37	S	

Legend:

Range	Scale	Verbal Interpretation	Symbol
5	4.20-5.00	Outstanding	O
4	3.40-4.19	Very Satisfactory	VS
3	2.60-3.39	Satisfactory	S
2	1.80-2.59	Fair	F
1	1.00-1.79	Poor	P

Table 6 reveals that the overall clarity of information, with a composite weighted mean of 3.37, was generally satisfactory. The indicator "Find information shared digitally clear and easy to understand" ranked highest, with a composite mean of 3.53, reflecting that respondents generally found digital communication clear and understandable. In contrast, the indicator "Recognize digital communication from the institution as straightforward" ranked lowest, with a mean of 3.29, indicating some difficulty in recognizing or understanding the clarity of institutional communication.

These findings are consistent with those of Garcia and Reyes (2021), who emphasized the importance of clear communication in maintaining engagement in digital environments. This implies that while the clarity of information shared through digital communication channels is generally satisfactory, further efforts should be made to enhance the consistency and recognition of digital messages.

This could include simplifying digital content, standardizing communication formats, and providing clearer instructions to ensure that all stakeholders—administrators, faculty, and students— can easily understand and recognize institutional communications.

Table 7 Effectiveness of the Digital Communication Channels As to Timeliness of Responses

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Receive prompt responses to queries sent through digital channels.	3.80	VS	3.06	S	3.40	VS	3.42	VS	4
2. Experience timely delivery of academic support online.	3.80	VS	3.21	S	3.52	VS	3.51	VS	2

3. Observe quick follow-up to inquiries made through digital platforms.	3.73	VS	3.27	S	3.45	VS	3.48	VS	3
4. Note timely responses from administrative departments.	3.90	VS	3.41	VS	3.45	VS	3.59	VS	1
5. Experience minimal delays in digital communications with staff.	3.17	S	3.41	VS	3.47	VS	3.35	VS	5
Overall Weighted Mean	3.68	VS	3.27	S	3.46	VS	3.47	VS	

Table 7 evaluates the effectiveness of digital communication channels in terms of the timeliness of responses among school administrators, faculty members, and students. The overall weighted mean of 3.47 suggests that all groups are generally Very Satisfactory in receiving timely responses through digital communication channels. The indicator "Note timely responses from administrative departments" ranked highest, with a composite mean of 3.59, indicating that administrative staff consistently provided timely responses. The indicator "Receive prompt responses to queries sent through digital channels" ranked lowest, with a composite mean of 3.42, suggesting that while responses are generally timely, there may still be occasional delays in handling queries.

These findings align with those of Cruz et al. (2022), who found that administrative departments tend to excel in response times compared with other areas. These results imply that while timeliness in digital communication is largely satisfactory, there is room for improvement, particularly in ensuring prompt replies to student inquiries and reducing delays across all channels. Institutions should focus on streamlining response processes and enhancing communication protocols to ensure consistent and timely services for all stakeholders.

Table 8 Effectiveness of the Digital Communication Channels As to Accessibility of Communication Channels

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Access digital communication tools whenever needed with ease.	3.57	VS	3.33	S	3.38	S	3.43	VS	1
2. Utilize email, chat, and other digital tools without difficulty.	3.33	S	3.33	S	3.35	S	3.34	S	3
3. Encounter few technical barriers	3.57	VS	3.16	S	3.42	VS	3.38	S	2

in accessing digital platforms.									
4. Navigate the institution's online messaging systems effectively.	3.20	S	3.07	S	3.35	S	3.21	S	5
5. Find communication channels available during and beyond regular hours.	3.33	S	3.33	S	3.15	S	3.27	S	4
Overall Weighted Mean	3.40	VS	3.24	S	3.33	S	3.32	S	

Table 8 displays the effectiveness of digital communication channels in terms of accessibility among school administrators, faculty members, and students. The overall weighted mean of 3.32, interpreted as satisfactory (S), reflects a moderate level of accessibility to communication tools. The indicator "Access digital communication tools whenever needed with ease" ranked first with a composite mean of 3.43, interpreted as Very Satisfactory (VS), highlighting that users generally find digital tools readily available. Conversely, "Navigate the institution's online messaging systems effectively" ranked lowest, with a composite mean of 3.21, interpreted as Satisfactory (S), indicating some difficulties in utilizing these systems.

Cruz et al. (2022) emphasize the critical role of user-friendly platforms in ensuring accessibility and effective communication. Similarly, Reyes and Santos (2023) highlighted that institutions with streamlined digital systems see higher engagement levels among users. The findings suggest that while digital tools are accessible to some extent, addressing barriers such as technical complexities and usability challenges can further enhance the stakeholder experience. Institutions should prioritize system optimization, provide user support, and improve platform navigation to ensure consistent and equitable access to the communication tools.

Table 9 Effectiveness of the Digital Communication Channels As to Transparency in Information Sharing

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Receive complete and transparent information digitally.	3.60	VS	3.44	VS	3.57	VS	3.54	VS	2
2. Feel well-informed about institutional policies shared online.	3.13	S	3.41	VS	3.62	VS	3.39	S	4
3. Observe comprehensive	3.13	S	3.49	VS	3.62	VS	3.41	VS	3

digital updates on academic guidelines.									
4. Perceive openness in communications about institutional decisions.	3.77	VS	3.81	VS	3.47	VS	3.68	VS	1
5. Note that online announcements cover all essential details.	3.13	S	3.49	VS	3.48	VS	3.37	S	5
Overall Weighted Mean	3.35	S	3.53	VS	3.55	VS	3.48	VS	

Table 9 portrays the effectiveness of digital communication channels in terms of transparency in information sharing among school administrators, faculty, and students. The overall composite weighted mean was 3.48, interpreted as Very Satisfactory (VS), indicating that the stakeholders perceived a high level of transparency in digital communications. The indicator "Perceive openness in communications about institutional decisions" ranked highest, with a mean of 3.68 (VS), reflecting positive perceptions of institutional openness. In contrast, "Note that online announcements cover all essential details" ranked lowest, with a mean of 3.37, interpreted as satisfactory (S), suggesting room for improvement in ensuring that all necessary details are consistently provided.

Consistent with the findings of Dela Cruz et al. (2023), transparency in institutional communication fosters trust and engagement among stakeholders. However, incomplete or unclear announcements may hinder users' ability to make informed decisions, as highlighted by Reyes (2022). These results imply the need for institutional efforts to enhance the comprehensiveness and detail of digital communication while maintaining a transparent and inclusive approach.

Table 10 Effectiveness of the Digital Communication Channels As to Consistency of Messaging

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Observe consistent information across different digital platforms.	3.80	VS	3.51	VS	3.43	VS	3.58	VS	1
2. Recognize uniform messaging from various departments.	3.17	S	3.50	VS	3.43	VS	3.37	S	2
3. Find alignment in announcements	3.07	S	3.44	VS	3.25	S	3.25	S	5

across digital channels.									
4. Receive standardized guidelines from institutional online sources.	3.30	S	3.33	S	3.22	S	3.28	S	4
5. Encounter few conflicting messages from digital sources.	3.40	VS	3.21	S	3.25	S	3.29	S	3
Overall Weighted Mean	3.35	S	3.40	VS	3.32	S	3.35	S	E

Table 10 reflects the effectiveness of digital communication channels in ensuring the consistency of messaging among school administrators, faculty members, and students. The composite weighted mean was 3.35, interpreted as satisfactory (S), indicating that while there was general satisfaction, opportunities for improvement remained in maintaining consistent messaging. The indicator "Observe consistent information across different digital platforms" ranked highest, with a mean of 3.58 (Very Satisfactory or VS), reflecting positive feedback regarding the coherence of digital communications. Conversely, "Find alignment in announcements across digital channels" ranked lowest, with a mean of 3.25 (Satisfactory or S), suggesting occasional inconsistencies in information delivery across platforms.

This finding aligns with Garcia and Santos (2022), who emphasized that inconsistencies in institutional messaging can lead to confusion among stakeholders. To address this, institutions should implement centralized communication oversight and adopt robust digital tools to standardize content across platforms. These actions would strengthen trust and facilitate better engagement among all stakeholders.

Alignment of Roles, Actions, and Decisions with the Institution's Core Values and Goals in a Digitally Transformed Environment.

Table 11 Perceptions on Alignment with Institutional Goals

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Perceive alignment between personal activities and the institution's objectives.	3.60	A	3.43	S	3.48	A	3.50	A	1
2. Recognize digital resources as supportive of the institution's core mission.	3.57	A	3.21	N	3.33	N	3.37	N	5
3. See academic work as aligned	3.73	A	3.17	N	3.45	A	3.45	A	3

with institutional goals.									
4. View digital platforms as reinforcing institutional values.	3.50	A	3.24	N	3.43	A	3.39	N	4
5. Feel that individual roles contribute to achieving institutional goals.	3.77	A	3.34	N	3.37	N	3.49	A	2
Overall Weighted Mean	3.63	A	3.28	N	3.41	A	3.44	A	

Legend:

Range	Scale	Verbal Interpretation	Symbol
5	4.20-5.00	Strongly Agree	SA
4	3.40-4.19	Agree	A
3	2.60-3.39	Neutral	N
2	1.80-2.59	Disagree	D
1	1.00-1.79	Strongly Disagree	DS

Table 11 presents stakeholder perceptions regarding the alignment of roles, actions, and decisions with institutional core values and goals in a digitally transformed environment, showing a composite weighted mean of 3.44 (Agree). Among the indicators, perceived alignment between personal activities and the institution's objectives ranked highest (3.50, Agree), indicating that stakeholders feel their efforts contribute to institutional goals. Similarly, I feel that individual roles contribute to achieving institutional goals received a high rating (3.49, Agree), reinforcing the purpose of the stakeholders. These findings align with Schein (2017), who emphasized that the alignment between individual actions and institutional objectives is critical for a unified organizational culture. However, some areas need improvement, particularly in terms of faculty and student perceptions. Indicators such as recognizing digital resources as supportive of the institution's core mission (3.37, Neutral) and viewing digital platforms as reinforcing institutional values (3.39, Neutral) received lower ratings, showing mixed views on the effectiveness of digital tools in reflecting institutional goals. This finding echoes Evans et al. (2020), who noted that while digital transformation can enhance alignment, the lack of targeted initiatives to integrate institutional values into digital platforms may hinder engagement. To improve alignment, institutions should strengthen the integration of goals and values into digital communication strategies. Developing training programs, optimizing digital tools, and engaging stakeholders in collaborative efforts can address these concerns, fostering an environment in which stakeholders clearly perceive their roles as vital to institutional success in a digital landscape.

Table 12 Perceptions on Awareness of Institutional Values

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Demonstrate awareness of institutional values like	3.30	N	3.31	N	3.43	A	3.35	N	2

Connect, Cooperate, and Collaborate.									
2. Identify digital initiatives as reflective of institutional values.	3.37	N	3.24	N	3.37	N	3.33	N	3
3. Understand how personal contributions align with institutional principles.	3.13	N	3.26	N	3.33	N	3.24	N	5
4. Observe the institution's values consistently reinforced in digital content.	3.33	N	3.23	N	3.40	A	3.32	N	4
5. View the institution's values as effectively communicated online.	3.37	N	3.57	A	3.47	A	3.47	A	1
Overall Weighted Mean	3.30	N	3.32	N	3.40	A	3.34	N	

Table 12 depicts the perceptions of school administrators, faculty members, and students regarding their awareness of institutional values, such as Connect, Cooperate, and Collaborate, which show a composite weighted mean of 3.34 (Neutral). This suggests a moderate level of awareness across all groups, with faculty members rating it highest at 3.47 (Agree) for the indicator "View the institution's values as effectively communicated online." The results indicate that while there is a general recognition of institutional values, the alignment between personal contributions and these values, particularly among administrators and faculty, needs strengthening, as indicated by relatively lower scores for the other indicators.

Recent studies have shown that digital transformation is critical for reinforcing institutional values and fostering greater alignment among stakeholders. For instance, Gonzales et al. (2020) emphasized the role of digital communication in aligning organizational values with individual actions, suggesting that clear digital initiatives enhance stakeholder engagement. Similarly, Rivera et al. (2022) noted that stakeholders' understanding of institutional values often varies depending on how well these values are integrated into the digital platforms. These findings support the idea that while the communication of values through digital content is viewed positively by students, faculty and administrators may require more explicit integration of these values into their daily digital interactions.

To improve awareness of institutional values, institutions should focus on reinforcing the consistency of these values in their digital content. This can be achieved by optimizing digital platforms to more effectively reflect core values and implementing targeted training for administrators and faculty to better align their personal contributions with institutional goals. By

enhancing digital communication and engagement, institutions can foster a stronger sense of connection among all stakeholders, ultimately promoting a more cohesive organizational culture.

Table 13 Perceptions on Role Clarity

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Maintain a clear understanding of roles within the institution.	3.33	N	3.46	A	3.45	A	3.41	A	1
2. Recognize how digital tasks contribute meaningfully to one's role.	3.40	A	3.40	A	2.80	N	3.20	N	4
3. Understand how responsibilities connect to institutional goals.	3.33	N	3.49	A	2.86	N	3.23	N	2
4. Find digital resources clarify roles within the institution.	3.03	N	3.43	A	2.89	N	3.12	N	5
5. Know how to navigate roles through digital guidance.	3.50	A	3.47	A	2.84	N	3.27	N	3
Overall Weighted Mean	3.32	N	3.45	A	2.97	N	3.25	N	

Table 13 reflects the perceptions of role clarity among school administrators, faculty members, and students, which show a composite weighted mean of 3.25 (Neutral), indicating that there is moderate clarity about roles across all groups. The highest-rated indicator, "Maintain a clear understanding of roles within the institution," received a weighted mean of 3.41 (Agree), suggesting that stakeholders generally understand their roles within the institution. However, other indicators, such as "Recognize how digital tasks contribute meaningfully to one's role" (3.20, Neutral) and "Find digital resources clarify roles within the institution" (3.12, Neutral), received lower ratings, reflecting some ambiguity regarding the role of digital tools in clarifying responsibilities.

Recent studies support the importance of role clarity in organizational effectiveness, particularly in the context of digital transformation. For example, Santos et al. (2020) noted that role clarity is essential for effective digital transformation, as unclear roles can hinder the effective use of digital resources in the educational context. Likewise, Cruz and Mendoza (2021) highlighted that while digital tools can facilitate role clarity, their effectiveness depends on how well these tools align with the organization's goals and individual responsibilities. These findings suggest that while digital resources are

recognized for their potential, there is room for improvement in their integration into role navigation and responsibilities.

To improve role clarity, institutions should focus on enhancing the digital tools and platforms used by stakeholders to ensure that they are aligned with institutional goals and individual responsibilities. Providing training and support to administrators, faculty, and students on how to effectively navigate digital resources can help clarify roles and foster a better understanding of how digital tasks contribute to institutional objectives is recommended. Strengthening these areas will improve role clarity, enabling stakeholders to better understand their contributions and work more efficiently within the institution

Table 14 Perceptions on Inclusivity in Decision-Making

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Feel included in decision-making through digital forums.	3.33	N	3.40	A	2.83	N	3.19	N	4
2. Engage in online discussions on institutional digital platforms.	3.47	A	3.49	A	2.80	N	3.25	N	2
3. Believe that digital consultations value individual input.	3.50	A	3.49	A	2.89	N	3.29	N	1
4. Contribute ideas through accessible digital channels.	3.40	A	3.40	A	2.79	N	3.20	N	3
5. Recognize digital platforms as enabling inclusive decision-making.	3.00	N	3.43	A	2.90	N	3.11	N	5
Overall Weighted Mean	3.34	N	3.44	A	2.84	N	3.23	N	

Table 14 displays the perceptions of inclusivity in decision-making, as indicated by the composite weighted mean of 3.23 (Neutral), suggesting that stakeholders have a moderate sense of involvement in decision-making processes, particularly in digital contexts. The highest-rated indicator, "Believe that digital consultations value individual input" (3.29, Neutral), suggests that school administrators and faculty members feel that their contributions are valued during digital consultations, but students report a lower level of involvement. Indicators such as "Feel included in decision-making through digital forums" (3.19, Neutral) and "Recognize digital platforms as enabling inclusive decision-making" (3.11, Neutral) suggest that there is a gap in how inclusive the decision-making processes are, especially for students.

Recent literature emphasizes the importance of inclusive decision-making for effective organizational performance, particularly in the context of digital transformation (DT). Aquino et al. (2020) highlighted that inclusivity in digital platforms enhances stakeholder

engagement and fosters a sense of ownership of institutional decisions. Similarly, Perez and Santiago (2021) found that while administrators and faculty members may feel more engaged, students often experience barriers to participating in digital decision-making processes, which can limit their sense of belonging and contributions to the institution's success.

To improve inclusivity in decision-making, institutions should focus on strengthening mechanisms for student participation on digital platforms, ensuring that their voices are heard and valued. This could involve creating more accessible and inclusive digital forums, providing opportunities for students to contribute ideas, and ensuring that digital consultations are structured to encourage input from all stakeholders. By doing so, the institution can foster a more collaborative and inclusive decision-making environment, where all members, regardless of their role, feel that their perspectives are considered in shaping the institution's direction.

Table 15 Perceptions on Commitment to Institutional Mission

Indicators	School Administrators		Faculty Members		Students		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. Feel a strong commitment to the institution's mission as emphasized digitally.	3.33	N	3.39	N	3.42	A	3.38	N	1
2. Recognize digital platforms as fostering a shared sense of purpose.	3.40	A	3.13	N	2.79	N	3.11	N	3
3. Feel motivated to support institutional goals through digital initiatives.	3.13	N	3.24	N	2.84	N	3.07	N	4
4. Experience a personal connection to the institution's mission online.	3.13	N	3.21	N	2.83	N	3.06	N	5
5. View digital engagement as aligned with the institution's mission.	3.33	N	3.37	N	2.81	N	3.17	N	2
Overall Weighted Mean	3.26	N	3.27	N	2.87	N	3.16	N	

The perceptions of commitment to the institutional mission show a composite weighted mean of 3.16 (Neutral), indicating a moderate sense of commitment to the institution's mission across all groups. The highest-rated indicator, "Feel a strong commitment to the institution's mission as emphasized digitally" (3.38, Neutral), suggests that school

administrators and students feel somewhat connected to the mission through digital initiatives. However, indicators such as "Feel motivated to support institutional goals through digital initiatives" (3.07, Neutral) and "Experience a personal connection to the institution's mission online" (3.06, Neutral) received lower ratings, reflecting some gaps in the perception of how digital engagement translates into a deeper, personal commitment to the mission.

Recent research underscores the importance of digital platforms in enhancing commitment to institutional missions. For instance, Gonzalez and Lim (2020) noted that while digital tools can amplify institutional messages, their effectiveness in fostering a personal connection to the institution's mission depends on the level of engagement and alignment of digital initiatives with institutional values. Similarly, Rivera et al. (2022) found that students are often less engaged with digital platforms that fail to create a strong sense of belonging or alignment with institutional goals, which can hinder their motivation to support these goals.

To strengthen commitment to the institutional mission, institutions should focus on improving the alignment of their digital initiatives with the mission and values that resonate with all stakeholders. Enhancing digital platforms to foster a personal connection to the mission, increasing interactive and engaging content, and providing more opportunities for stakeholders to contribute to institutional goals can help improve commitment to the institution. By doing so, institutions can create a more unified and motivated community in which stakeholders feel personally connected to the institution's mission, especially in a digitally transformed environment.

Significant difference in the assessment of the three groups of respondents as to Digital Transformation's Role in Strengthening Academic Cohesion

Table 16 Comparative Assessment on the Digital Transformation's Role in Strengthening Academic Cohesion

Areas of Concern		SS	MSS	df	F-value	Critical Value	Interpretation	Decision
1. Digital Tools and Platforms Affect the Engagement Levels	Bet. Grp	0.078	0.039	2	2.29341	3.88	Not Significant	Accept Ho
	Within Grp.	0.205	0.017	12				
2. Effectiveness of the Digital Communication Channels	Bet. Grp	0.001	0.0006	2	0.03047	3.88	Not Significant	Accept Ho
	Within Grp.	0.254	0.021	12				
3. Perceptions of the Alignment of their Roles, Actions, and Decisions with the Institution's	Bet. Grp	0.046	0.023	2	0.06285	3.88	Not Significant	Accept Ho
	Within Grp.	0.441	0.037	12				

Core Values
and Goals in
a Digitally
Transformed
Environment

Level of Significance: 0.05

The results in Table 20 show that the computed F-values for the three areas of concern in the digital transformation's role in strengthening academic cohesion—Digital Tools and Platforms Affect the Engagement Levels ($F = 2.29341$), Effectiveness of the Digital Communication Channels ($F = 0.03047$), and Perceptions of the Alignment of their Roles, Actions, and Decisions with the Institution's Core Values and Goals in a Digitally Transformed Environment ($F = 0.06285$)—are all lower than the critical value of 3.88 at a 0.05 level of significance. The null hypothesis (H_0) that there is no significant difference between the assessments of the three groups of respondents—school administrators, faculty members, and students of the College of Business and Public Administration (CBPA)—is accepted for all three variables. This implies that the perceptions and assessments of the role of digital transformation in strengthening academic cohesion do not differ significantly among these groups.

This finding aligns with recent studies that have shown mixed or non-significant differences in the perceptions of digital tools and platforms in educational settings. For instance, Garcia et al. (2021) found that while digital tools were recognized as enhancing engagement, the differences in how various stakeholders, including administrators, faculty, and students, perceived their effectiveness were not significant, suggesting that the overall impact of digital transformation may be similarly understood across different groups. Similarly, Rivera et al. (2022) noted that while there were some differences in the effectiveness of communication channels, these differences were not statistically significant, reinforcing the idea that the role of digital transformation in academic cohesion might be perceived similarly by school administrators, faculty members, and students, despite their varied positions.

This result implies that the CBPA should focus on improving the overall effectiveness of its digital platforms and communication channels, as there are no significant differences in how the three groups—school administrators, faculty members, and students—perceive these tools. This finding suggests a uniform level of engagement and alignment across stakeholders, which can inform institutional strategies aimed at enhancing academic cohesion through digital transformation. Since there is no significant variation in perceptions, efforts may be better directed toward refining the tools and resources themselves, ensuring they cater effectively to all groups rather than addressing perceived disparities across stakeholder groups.

Limitations and future research directions

This study had several limitations that should be addressed in future research. The sample size was relatively small and focused on a specific geographic region, which may limit the generalizability of the findings to other regions. Additionally, the cross-sectional design prevented the establishment of causal relationships between variables. Future studies should employ longitudinal designs to better understand the temporal dynamics of the observed phenomena. Reliance on self-report measures may have introduced bias, and future research could benefit from incorporating objective measures or multi-method approaches. Furthermore, this study did not account for potential moderating variables that could influence the relationships examined. Future investigations should explore

additional factors that may impact the observed associations and consider expanding the scope to include diverse populations and cultural contexts. Lastly, replication studies are needed to validate the current findings and further refine the theoretical framework proposed in this research.

CONCLUSION

This study examined the role of digital transformation in strengthening academic cohesion at the College of Business and Public Administration (CBPA), focusing on the perspectives of school administrators, faculty, and students. The findings reveal several key insights: digital tools and platforms generally enhance engagement levels across academic, social, collaborative, and resource utilization activities, though with some variations among stakeholder groups; the effectiveness of digital communication channels is largely satisfactory, particularly in terms of clarity and timeliness, but there is room for improvement in accessibility and consistency of messaging; stakeholders generally perceive alignment between their roles and the institution's core values and goals in the digitally transformed environment, though awareness and clarity of these aspects could be strengthened; and there were no significant differences in the assessment of digital transformation's role in strengthening academic cohesion among the three groups of respondents. These findings highlight the importance of continued investment in digital infrastructure and literacy to support academic collaboration. Institutions should focus on enhancing digital platforms to better reflect core values and institutional goals, provide targeted training to improve stakeholders' digital skills and understanding of their roles, develop more inclusive digital decision-making processes, especially for students, and strengthen the integration of institutional missions into digital initiatives. By addressing these areas, the CBPA can leverage digital transformation to create a more cohesive academic environment that supports engagement, communication, and alignment with institutional objectives across all stakeholder groups. Future research should explore the long-term impact of digital transformation on academic cohesion and institutional performance.

Recommendations

Based on the study's findings, it is recommended that the College of Business and Public Administration (CBPA) continue investing in digital infrastructure and literacy programs to enhance academic cohesion. Institutions should focus on improving digital platforms to better reflect core values and institutional goals, provide targeted training to enhance stakeholders' digital skills and role understanding, develop more inclusive digital decision-making processes (especially for students), and strengthen the integration of the institutional mission into digital initiatives. Additionally, the CBPA should address areas where digital communication can be improved, particularly in terms of accessibility and consistency of messaging. By implementing these recommendations, institutions can leverage digital transformation to create a more cohesive academic environment that supports engagement, communication, and alignment with institutional objectives across all stakeholder groups.

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