

EMPOWERING DIGITAL TRANSFORMATION IN EDUCATIONAL MANAGEMENT: A COMMUNITY SERVICE PROGRAM AT UNISSA, BRUNEI DARUSSALAM

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Abstract

The rapid advancement of digital technologies has fundamentally reshaped educational systems worldwide, compelling higher education institutions to adopt adaptive management strategies that align with evolving pedagogical and operational demands. In this context, a community service program (Pengabdian kepada Masyarakat – PKM) was implemented at Universiti Islam Sultan Sharif Ali (UNISSA), Brunei Darussalam, to strengthen institutional capacity for digital transformation in educational management. The program specifically targeted UNISSA's administrators, lecturers, IT personnel, and selected student representatives, fostering a comprehensive understanding of digital governance, smart campus systems, Learning Management System (LMS) optimization, and the integration of artificial intelligence (AI) in higher education. Using a combination of public seminars, interactive workshops, hands-on demonstrations, mentoring sessions, and knowledge-sharing activities, the initiative facilitated bilateral learning between Universitas Mulawarman (UNMUL) and UNISSA. The program's outcomes included improved comprehension of digital management frameworks, heightened awareness of the role of digital leadership and robust infrastructure, and the identification of strategic pathways for sustaining transformation. Additionally, cross-institutional exchange enriched participants' perspectives by integrating global best practices with localized policy and cultural contexts. The PKM not only advanced UNISSA's readiness for digital innovation but also strengthened long-term academic collaboration between Indonesia and Brunei Darussalam.

Keywords: Digital Transformation, Educational Management, Community Service, UNISSA, Higher Education

INTRODUCTION

Digital transformation in education represents a fundamental shift in how educational institutions operate, mandating an adaptive response from management practices to navigate this evolving landscape effectively. The global trends driving this transformation are underscored by the rising integration of digital technologies and innovative pedagogical

approaches, which have been accelerated by the COVID-19 pandemic's disruption of traditional learning modalities (Bogdandy et al., 2020; Ortiz et al., 2021; Ansari et al., 2023). A significant trend is the push toward employing artificial intelligence (AI) and adaptive learning technologies in educational management. As highlighted by Siminto et al., utilizing AI tools not only enhances operational efficiency in education management but also tailors learning experiences to meet individual student needs, fostering a more responsive educational environment (Siminto et al., 2023; Sinurat et al., 2024; Widodo et al., 2024). This points to a broader necessity for educational leaders to embrace strategic adaptation—a term discussed by Nisa and Aimah—where institutions must proactively adjust their quality management strategies to align with digital advancements and societal changes, ensuring sustained educational outcomes (Nisa & Aimah, 2024).

Moreover, the agile management practices highlighted by Scaglione et al. reflect another critical adaptation strategy in higher education. The ability to improvise and react to rapid changes within educational settings has become essential, enabling institutions to implement incremental innovations that address immediate challenges while paving the way for more substantial transformations in the future (Scaglione et al., 2019; Manurung et al., 2025). This agile approach empowers educational leaders to enhance organizational resilience and adaptability in the face of disruptive technologies, as emphasized by Tiwow et al. They argue that effective human resource management is vital in fostering organizational agility, which is increasingly necessary to navigate the complexities posed by ongoing digital transformations (Tiwow et al., 2023).

In conjunction with these management approaches, a focus on curriculum development and educational practices is essential. According to Nazmi et al., future educational management must prioritize adaptive learning environments that cater to diverse student needs, emphasizing inclusion and tailored educational experiences (Nazmi et al., 2023; Saddhono et al., 2024; Sinaga et al., 2024). This view is supported by Suwarni, who posits that curriculum management strategies in the global education context must continuously adapt to integrate technological advancements while addressing the evolving skills required in the job market (Suwarni, 2023).

The integration of digital systems within higher education institutions presents various challenges that require comprehensive strategies to overcome. As institutions increasingly acknowledge the necessity of digital transformation, obstacles arise from organizational inertia, infrastructure limitations, and inherent resistance to change from faculty and administration (Saragih et al., 2024). One significant challenge highlighted by Bosman et al. relates to the high costs and technological complexity associated with immersive technologies such as virtual reality (VR) and augmented reality (AR) (Bosman et al., 2024). Although these tools provide engaging educational experiences, their adoption is often constrained by financial limitations and the skills gap among educators. This reflects broader findings by Al-Balawi, who identifies inadequate infrastructure and the need for improved communication among educational stakeholders as critical barriers to effective digital transformation (Al-Balawi, 2022). Institutions often struggle to connect technological enhancements with the desired educational outcomes, leading to a disconnection between investment and impact.

Moreover, a lack of digital leadership is frequently cited as a barrier to successful digital implementation. Sukandi emphasizes that without leaders who can effectively drive the digital

transformation processes in alignment with technological advancements, higher education institutions may fall behind in adapting to current educational demands (Sukandi, 2024). This lack of strategic oversight can exacerbate difficulties in integrating new technologies, as staff may feel unsupported or unsure about the transition. Resistance to change, particularly among faculty, plays a crucial role in hindering the adoption of digital systems. According to Moreno-Aguilar, academic staff often express resistance due to concerns about the efficacy of new technology in enhancing teaching and learning processes (Moreno-Aguilar, 2023). Additionally, research by Haugsbakken and Langseth reveals that traditional bureaucratic structures within higher education limit the fluidity necessary for digital adoption, further complicating efforts to integrate innovative technologies like blockchain (Haugsbakken & Langseth, 2019). This resistance can stem from fears of obsolescence or discomfort with new methodologies, as noted by Gorla, where educators are sometimes reluctant to alter long-standing practices (Gorla, 2021).

Furthermore, the implementation of Learning Management Systems (LMS) often encounters organizational change readiness challenges, as outlined by Veseli et al., who suggest that initial resistance can manifest as disengagement among staff, negatively affecting implementation efforts (Veseli et al., 2025). This phenomenon underscores the importance of establishing a culture receptive to change, where stakeholders feel empowered and involved in the journey of digital integration (Багратиони & Thurner, 2023). Cloud computing emerges as a potential solution to several challenges facing higher education institutions, offering cost-effective and scalable resources for faculty and students. Nevertheless, Khan's research points to barriers in this transition, including collaboration difficulties and data management concerns, which must be addressed to fully leverage cloud technologies (Khan, 2018).

Capacity building through academic collaboration is essential for enhancing educational quality and equipping institutions to adapt to the rapidly changing landscape of higher education. This process involves strengthening the skills, competencies, and capabilities of educators and academic staff while fostering partnerships that drive innovation and effective teaching practices. The importance of collaborative approaches can be observed through various dimensions such as teaching performance, research capacity, and the adoption of innovative pedagogies. One significant aspect of capacity building is its direct impact on teacher performance. Savitri and Sudarsyah emphasize that competency-based education and well-defined career development pathways are essential for improving teachers' abilities, thus increasing overall institutional performance Savitri & Sudarsyah (2021). They discuss how transformational leadership can support educators through capacity-building initiatives, enhancing their engagement and effectiveness in the classroom, which leads to better student outcomes.

In the context of research, Murray and Vanassche describe how collaborative efforts, such as the InFo-TED project, foster research capacity in teacher education across Europe (Murray & Vanassche, 2019). By working with like-minded colleagues, educators can share best practices, thus facilitating continuous professional development and ensuring that new educational paradigms are implemented effectively. Collaborative frameworks not only enhance the individual capabilities of educators but also create a community of practice that benefits the broader educational environment. Capacity building initiatives are particularly important in engineering education, as highlighted by Kövesi et al. (Kövesi et al., 2022). Their

research indicates that academic staff engaged in professional development are more likely to adopt active learning strategies and student-centered approaches. This shift in pedagogical practices is crucial for improving student engagement and learning outcomes, further reinforcing the necessity for capacity building as a standard practice in academic settings.

Additionally, addressing workforce challenges is vital for successful capacity building, particularly in specific disciplines, as pointed out by Cabatan et al. (Cabatan et al., 2021). Their study outlines how the faculty learning community (FLC) model effectively supports the professional growth of new academics, showing that collaborative approaches can address recruitment and development challenges. This highlights the importance of creating supportive networks that enhance teaching effectiveness and institutional sustainability. Research capacity building is another critical area addressed by Oancea et al., who emphasize the role of institutional collaboration in enhancing educators' abilities to manage and conduct high-quality research (Oancea et al., 2021). This alignment between teaching and research capabilities is vital for fostering a culture of inquiry in educational institutions, ultimately benefiting both faculty and students. Such collaborative mechanisms enhance not only individual skill sets but also lead to improved educational policies and practices.

Brief overview of UNISSA and the rationale for choosing Brunei Darussalam as the location

Universiti Islam Sultan Sharif Ali (UNISSA) is Brunei Darussalam's first national Islamic university, officially established in January 2007. Named after Sultan Sharif Ali—a revered historical figure and descendant of the Prophet Muhammad—the university carries a strong legacy of Islamic scholarship and leadership. UNISSA aims to be a center of excellence in Islamic education, offering a diverse range of academic programs across undergraduate and postgraduate levels. The institution integrates the teachings of the Qur'an and al-Sunnah into its curriculum and fosters a holistic approach to education that emphasizes intellectual, ethical, and spiritual development. With a mission to produce competent Muslim scholars and professionals, UNISSA continues to contribute significantly to the academic, cultural, and socio-economic development of Brunei and the wider Muslim world.

Brunei Darussalam was strategically chosen as the location for this community service program due to its ongoing commitment to digital transformation in education. The Ministry of Education of Brunei has launched the Digital Transformation Plan 2023–2027, which aligns with the country's broader Digital Economy Masterplan 2025 and Vision Brunei 2035. These national policies underscore the government's dedication to enhancing the quality of education through the integration of digital technologies, including smart campus systems, digital governance, and data-driven educational management. UNISSA, as one of the leading institutions in the country, is actively involved in these national efforts and serves as an ideal partner for the implementation of programs that aim to promote digital literacy and innovation in educational leadership.

The implementation of this PKM activity at UNISSA represents not only a transfer of knowledge and expertise but also a form of international academic collaboration. By engaging directly with institutional leaders and educators in Brunei, this initiative supports cross-border learning and contributes to the global discourse on digital transformation in higher education.

It also reflects the commitment of Indonesian academic institutions to play an active role in regional development through meaningful community engagement.

Objectives of the PKM activity:

The primary objective of this community service program (PKM) is to introduce key concepts and strategic frameworks related to digital transformation in education, with a specific focus on their implications for educational management practices. Through structured presentations and interactive sessions, the activity seeks to enhance participants' understanding of how emerging digital technologies—such as learning management systems, AI-based tools, and digital governance—can be effectively integrated into institutional systems to improve efficiency, decision-making, and student engagement.

In addition to conceptual exposure, the program aims to build institutional awareness and readiness by encouraging reflective dialogue among academic leaders, administrators, and educators. By sharing best practices, case studies, and diagnostic tools, the activity facilitates a critical assessment of each institution's current digital maturity and helps identify strategic entry points for transformation.

Finally, this PKM activity is designed to foster cross-border academic collaboration between Indonesian and Bruneian higher education institutions. By engaging with UNISSA as a partner, the program promotes mutual learning and reinforces the value of international cooperation in addressing shared challenges in educational innovation. This collaboration serves as a foundation for future joint initiatives and research in the area of digital education management.

METHOD OF IMPLEMENTATION

Preparation Phase

The preparation phase of the community service program was carried out with thorough planning and coordination to ensure the effectiveness of the activities at UNISSA. The first step involved internal coordination with the home institution, Universitas Mulawarman (UNMUL), to establish a shared understanding of the program's objectives, scope, and expected outcomes. This included aligning the academic goals of the program with institutional priorities and securing administrative and logistical support from relevant university units.

Following internal alignment, a formal communication process was initiated with Universiti Islam Sultan Sharif Ali (UNISSA), Brunei Darussalam. This collaboration began with a mutual agreement outlining the nature of the partnership, proposed activities, and roles of each party involved. Coordination was carried out through a series of virtual meetings and email correspondences, which facilitated the exchange of information and planning details. Key stakeholders at UNISSA, including faculty members, academic leaders, and administrative personnel, were actively involved in the preparation process.

An essential component of this phase was the identification of the program's target participants and their specific needs. The participant group was determined to include institutional decision-makers, IT staff, educational practitioners, and academic administrators—individuals directly involved in implementing or overseeing digital transformation initiatives at the university level. To ensure relevance and impact, a brief needs

assessment was conducted through informal interviews and document reviews to understand the digital maturity level of the institution and its current priorities.

Based on the identified needs, the program team developed structured modules and learning materials tailored to the context of UNISSA. These materials covered key themes such as digital governance frameworks in higher education, the concept and implementation of smart campus environments, optimization of Learning Management Systems (LMS), and the integration of artificial intelligence (AI) in educational management. Each module was designed to be both informative and interactive, encouraging active engagement and critical reflection among participants. The content development process also considered the cultural and institutional context of Brunei, ensuring that the material would be contextually appropriate and applicable.



Figure 1. Coordination meeting between UNMUL and UNISSA for the PKM on digital transformation in educational management

As part of the preparation phase, a virtual coordination meeting was conducted between representatives of Universitas Mulawarman (UNMUL) and Universiti Islam Sultan Sharif Ali (UNISSA), Brunei Darussalam. This meeting served as a critical step in establishing mutual understanding regarding the objectives, scope, and implementation strategies for the community service program focused on digital transformation in educational management. The coordination was attended by key stakeholders from both institutions. Representing UNISSA were Supree and Dr. Halimaturradiah (Hal DHM), who are actively involved in academic planning and digital education initiatives at the university. From UNMUL, Ahmad Fitriadi participated to present the proposed program content and discuss collaborative arrangements. During the meeting, both parties agreed on the thematic focus of the activities—covering digital governance, smart campus systems, learning management platforms, and the integration of AI in education. The discussion also included identification of the program’s target audience, logistical needs, and institutional priorities. This coordination ensured that the materials and activities would be tailored to UNISSA’s context and aligned with Brunei’s broader digital education strategies. The virtual meeting exemplified the spirit of international academic collaboration and laid a strong foundation for the successful execution of the PKM activities at UNISSA.

Implementation Phase

The implementation of the community service program at Universiti Islam Sultan Sharif Ali (UNISSA) began with a public lecture and seminar session attended by academic leaders, lecturers, IT personnel, and administrative staff. This opening session provided an overview of global trends in digital transformation and their implications for educational management, highlighting best practices and strategic frameworks that institutions can adopt. The seminar emphasized key themes such as digital governance, smart campus ecosystems, the optimization of Learning Management Systems (LMS), and the role of artificial intelligence in enhancing institutional efficiency and learning outcomes.



Figure 2. Public Lecture and Seminar Session by Prof. Dr. Hj. Widyatmike Gede Mulawarman, M.Hum

Following the public lecture, the program proceeded with small group discussions and workshop activities. These sessions allowed participants to explore the topics in greater depth, engage in peer-to-peer knowledge sharing, and discuss the applicability of the presented concepts within UNISSA's institutional context. The workshops were designed to be interactive, encouraging participants to share their current practices, challenges, and potential solutions in managing digital transformation initiatives.



Figure 3. Explanation about managing digital transformation initiatives by Prof. Dr. Azainil, M.Si

Where applicable, the program included live demonstrations of selected digital tools and platforms relevant to higher education management. This practical component showcased how technologies such as LMS analytics dashboards, AI-assisted academic planning tools, and digital governance platforms can be integrated into institutional operations. Participants were given the opportunity to interact with these tools, ask questions, and consider potential adoption strategies tailored to their respective roles and responsibilities.



Figure 4. The Digital Tools Interactions with the Participants

Date and location

The community service program was conducted from 4 October to 11 October 2023 at Universiti Islam Sultan Sharif Ali (UNISSA), located in Gadong, Brunei Darussalam. The activities were hosted within UNISSA's main campus facilities, utilizing lecture halls for the public seminar sessions and designated meeting rooms for small group discussions and workshops. The university's digital infrastructure and presentation equipment were also employed to support the delivery of materials and live demonstrations, ensuring an effective and engaging learning environment for all participants.

Media/tools used: presentation, case studies, interactive Q&A, policy discussion

To facilitate effective delivery and engagement, the program utilized a combination of media and tools tailored to the needs of the participants. Presentations were employed to convey key concepts, frameworks, and real-world examples of digital transformation in educational management. Case studies drawn from both international and regional contexts were presented to illustrate practical applications and highlight lessons learned from successful implementations. An interactive question-and-answer (Q&A) session allowed participants to seek clarification, share perspectives, and engage in dialogue with the facilitators, fostering a collaborative learning atmosphere. Additionally, policy discussions were conducted to encourage participants to critically examine existing institutional regulations and explore potential policy adjustments that could better support digital transformation initiatives within UNISSA and similar higher education environments.

Evaluation Phase

The evaluation phase of the community service program was designed to assess the effectiveness, relevance, and overall impact of the activities conducted at UNISSA. Feedback was collected through structured feedback forms distributed to all participants at the end of the program. These forms gathered insights on the clarity of the materials, the applicability of the topics, the effectiveness of the delivery methods, and suggestions for future improvements. In addition to written feedback, reflection sessions were held to allow participants to share their experiences, highlight key takeaways, and discuss how they planned to apply the knowledge and strategies gained in their respective institutional contexts.



Figure 5. Feedback from the UNISSA – Brunei participant

Participant engagement was also closely observed throughout the program. The facilitation team monitored levels of interaction during discussions, responsiveness in Q&A sessions, and active participation during workshops and tool demonstrations. These observations provided qualitative insights into the participants' interest, motivation, and readiness to implement digital transformation initiatives in their institutions.

Furthermore, informal interviews and testimonials were gathered from selected participants, including academic leaders, lecturers, and administrative staff. These personal accounts provided richer narratives on how the program influenced their perspectives on educational management and digital innovation. Several participants expressed appreciation for the program's practical approach and the opportunity for cross-border collaboration, noting that the experience had broadened their understanding of global trends and localized strategies in digital transformation for higher education.

RESULTS AND DISCUSSION

Participation and Engagement

The community service program at Universiti Islam Sultan Sharif Ali (UNISSA) successfully attracted a diverse group of participants representing various functional roles within the institution. A total of [insert exact number] individuals attended the activities, comprising academic leaders, lecturers from multiple faculties, IT personnel responsible for digital infrastructure, and administrative staff engaged in policy and operational management. This mix of participants ensured a holistic representation of the university's stakeholders, allowing for multifaceted perspectives in discussions on digital transformation.

Throughout the sessions, the level of interest was consistently high. During the public lecture, participants demonstrated active listening, frequently taking notes and posing relevant questions that reflected a strong grasp of the presented material. In the workshop and small group discussions, engagement was even more pronounced, with participants sharing institutional experiences, identifying challenges, and brainstorming actionable solutions tailored to UNISSA's context.

The interactive Q&A segments within educational settings serve as crucial platforms for promoting critical dialogue, enabling participants to engage with and explore various digital tools and their implications for teaching methodologies. These discussions, particularly focused on the integration of AI into educational practices, provide an open exchange of ideas that reflects both intellectual curiosity and a commitment to innovation among participants. AI tools have been shown to enhance personalized learning experiences, allowing educators to give tailored feedback and support to students (Yunina, 2023; Konyrova, 2024).

Moreover, practical demonstrations during these segments encourage educators to actively experiment with various digital tools and assess their functionalities for real-world applications within existing university systems. This hands-on approach not only facilitates an understanding of the tools but also promotes a systematic evaluation of their integration potential in higher education contexts. Research indicates that educators who engage with AI tools can discuss their applications extensively, fostering an environment conducive to technological adaptation (Costa et al., 2024; Luo, 2024).

The willingness to embrace digital transformation among participants is further reflected in broader conversations about institutional policies that support digital governance. Educational institutions increasingly recognize the necessity of formulating policies that facilitate the integration of such technologies while also addressing associated ethical considerations. This movement towards structured digital governance ensures that the adoption of innovative tools aligns with educational objectives and enhances the overall learning experience (Holmes et al., 2021; Alenezi, 2024).

Overall, the diversity of participants, coupled with their enthusiasm and collaborative spirit, contributed significantly to the program's impact. The active participation not only facilitated knowledge transfer but also fostered a shared commitment to advancing digital transformation within UNISSA, aligning closely with Brunei's national digital education strategies.

Knowledge Transfer Impact

The program yielded a notable improvement in participants' understanding of digital management frameworks relevant to higher education. Through structured presentations and case study discussions, participants gained a clearer grasp of the core components of digital governance, smart campus systems, and data-driven decision-making processes. The exposure to international best practices, coupled with contextualized examples tailored to UNISSA's operational environment, enabled participants to visualize how these frameworks could be integrated into their own institutional strategies. Many participants expressed that the conceptual models provided during the sessions would serve as valuable references for future policy formulation and project planning within their faculties and administrative units.

In addition, the activities successfully raised awareness of the importance of digital leadership and robust infrastructure in driving institutional transformation. Discussions highlighted that effective digital transformation requires not only technological tools but also leadership that can guide change, foster collaboration, and ensure sustainable adoption of innovations. Participants recognized the need for leaders to champion digital initiatives, allocate appropriate resources, and create an environment conducive to experimentation and

continuous improvement. The sessions also shed light on the role of resilient and scalable digital infrastructure as the backbone for implementing advanced systems such as Learning Management Systems (LMS), AI-assisted platforms, and integrated governance tools.

As a result, the PKM program at UNISSA contributed to building a more informed and strategically aware community of educators and administrators. This enhanced understanding is expected to influence decision-making processes at various institutional levels, aligning UNISSA's internal initiatives with Brunei Darussalam's broader digital education agenda.

Cross-Institutional Learning

One of the most valuable outcomes of the program was the opportunity for mutual learning between Universitas Mulawarman (UNMUL) and Universiti Islam Sultan Sharif Ali (UNISSA). By engaging directly with UNISSA's administrators, lecturers, and IT personnel, the facilitation team gained valuable insights into the university's ongoing digital transformation journey, including the strategies, challenges, and innovations unique to Brunei Darussalam's higher education environment. Participants from UNMUL observed how UNISSA's initiatives are closely aligned with national policies such as the Brunei Digital Transformation Plan 2023–2027 and Vision Brunei 2035, which emphasize the integration of Islamic values, local cultural contexts, and digital innovation.

The sessions also enabled a bilateral exchange of ideas and strategies. UNMUL facilitators shared Indonesian case studies and practical tools for implementing digital governance, optimizing Learning Management Systems, and integrating AI in educational management. In return, UNISSA participants offered perspectives on policy alignment, resource optimization in smaller-scale higher education settings, and maintaining a balance between technological adoption and institutional traditions. This reciprocal sharing not only enriched the content of the discussions but also fostered a sense of collegiality and respect for each institution's unique approach to educational innovation.

The exchange reinforced the importance of tailoring digital transformation strategies to local needs while remaining informed by global best practices. It also laid the groundwork for potential future collaborations, such as joint research projects, capacity-building workshops, and staff or student exchanges, aimed at strengthening the regional network for digital education advancement. Such collaborations can enhance the overall quality of educational delivery by integrating diverse perspectives and experiences from various institutions. Mena-Guacas et al. (2023) highlight the significance of developing robust digital skills among students, which can be fostered through collaborative projects that emphasize mutual learning and the sharing of best practices across institutions (Mena-Guacas et al., 2023). These initiatives can lead to the development of tailored digital strategies that reflect the unique contexts and challenges faced by different educational environments.

Joint research efforts will not only promote a shared understanding of effective digital practices but also bridge gaps in knowledge across various educational systems. Research by (Maryani et al., 2023) suggests that collaborative initiatives in digital education technology can stimulate further inquiry and innovation, thereby enhancing the quality of educational outputs (Maryani et al., 2023). Furthermore, capacity-building workshops are essential for equipping educators with the necessary skills to effectively implement and adapt digital tools in their teaching. Such workshops can provide a platform for educators to share their experiences with

technology integration and learn from one another, as noted by Sarva and Puriņa-Biezā (2023), who emphasize the role of collaboration as a main success factor in the effective implementation of technology-enhanced learning (Sarva & Puriņa-Biezā, 2023).

Staff and student exchanges also have the potential to enrich educational practices by allowing participants to directly experience and contribute to different pedagogical approaches. Sarva and Puriņa-Biezā (2023) highlight that collaboration among educators fosters an environment where both inexperienced and experienced implementers can learn from each other's strengths in a collaborative learning environment (Sarva & Puriņa-Biezā, 2023). These exchanges not only enhance individual professional development but also contribute to building a stronger regional network that can more effectively address the challenges of digital education.

CONCLUSION

The community service program (PKM) conducted at Universiti Islam Sultan Sharif Ali (UNISSA), Brunei Darussalam, made significant contributions to empowering digital transformation in educational management. Through a combination of public lectures, workshops, interactive discussions, and practical demonstrations, the program enhanced participants' understanding of digital governance frameworks, smart campus systems, Learning Management System (LMS) optimization, and the integration of artificial intelligence in higher education. It not only strengthened institutional capacity by equipping academic leaders, lecturers, IT personnel, and administrative staff with relevant knowledge and strategies but also fostered a culture of collaboration and openness toward technological innovation.

Beyond its immediate outcomes, this PKM serves as a meaningful example of international academic service functioning as a form of institutional diplomacy. By engaging in direct collaboration between Universitas Mulawarman (UNMUL) and UNISSA, the program facilitated a bilateral exchange of knowledge, experiences, and policy insights, thereby deepening mutual understanding and respect between the two institutions. Such engagements contribute to building long-term academic relationships that transcend geographic boundaries and reflect the shared commitment of higher education institutions to regional development and educational advancement.

Looking forward, the program underscores the importance of sustainable collaboration in advancing educational management in the digital era. The momentum generated through this initiative should be maintained through follow-up activities such as joint research projects, co-developed training programs, and reciprocal staff or student exchanges. By continuing to work together, institutions like UNMUL and UNISSA can not only strengthen their own capacities but also contribute to shaping a more adaptive, innovative, and interconnected higher education ecosystem across Southeast Asia.

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