

STRENGTHENING DIGITAL OFFICE ADMINISTRATION COMPETENCIES THROUGH INTERNATIONAL COMMUNITY ENGAGEMENT: AN INDONESIA–MALAYSIA COLLABORATIVE PROGRAM

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ABSTRACT

The rapid development of digital technology and Artificial Intelligence (AI) requires higher education institutions to equip students with competencies relevant to the digital workplace. This community engagement program aimed to strengthen students' competencies in Digital Office Administration through an international collaboration between Universitas Negeri Jakarta (Indonesia) and Universiti Kebangsaan Malaysia. Conducted in a hybrid format, the program combined expert lectures, interactive discussions, and knowledge exchange involving students from both countries. The learning topics focused on Digital Office Administration, AI for administrative support, and Modern Service Practices. Program evaluation using pre-test and post-test indicated an improvement in participants' understanding of the topics presented. The program also strengthened international academic collaboration while enhancing students' readiness to adapt to digital transformation in office administration.

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INTRODUCTION

The rapid advancement of digital technologies has significantly transformed office administration practices across both public and private organizations. Conventional administrative tasks, which were previously dominated by manual documentation and paper-based workflows, have evolved into integrated digital systems supported by cloud computing, automation, and Artificial Intelligence (AI). Consequently, office professionals are expected not only to possess technical administrative skills but also digital literacy, problem-solving abilities, and the capacity to adapt to emerging technologies (Yanti et al., 2021). Artificial Intelligence has become one of the most influential technologies in modern office administration. AI-powered applications assist administrative personnel in document management, scheduling, communication, information retrieval, and decision support, enabling organizations to improve efficiency and service quality (Ngurah Sanjaya et al., 2025). At the same time, organizations increasingly demand graduates who are capable of utilizing intelligent systems while maintaining professional ethics and customer-oriented service. Therefore, higher education institutions play a strategic role in preparing students with competencies that align with the digital transformation of the workplace and strengthen graduates' digital employability skills (Đorđević et al., 2025).

Office Administration Education programs are challenged to continuously update learning approaches to reflect current industrial practices. Beyond theoretical knowledge, students require practical exposure to digital office systems, international perspectives, and collaborative learning experiences that enhance their readiness for the global workforce. International collaboration has become an effective strategy to broaden students' understanding by exposing them to different administrative practices, technological innovations, and cross-cultural communication (Dewanti et al., 2026). To address these challenges, the Office Administration Education Study Program, Faculty of Economics and Business, Universitas Negeri Jakarta (Indonesia), collaborated with Universiti Kebangsaan Malaysia (Malaysia) in implementing an International Community Engagement Program entitled Transforming Digital Office Administration Education through Intelligent Systems and Modern Service Practices. The program was designed to strengthen students' competencies in Digital Office Administration through expert lectures, interactive discussions, and international knowledge exchange. The learning topics focused on Digital Office Administration, Artificial Intelligence for administrative support, and Modern Service Practices, enabling participants to understand current trends and best practices in office administration from both Indonesian and Malaysian perspectives. This program addresses potential gaps between students' theoretical knowledge and practical skills in using digital office systems, AI tools, and modern service practices. The collaboration between Universitas Negeri Jakarta and Universiti Kebangsaan Malaysia is expected to help students learn best practices from both countries and develop digital, professional, and intercultural competencies for the global workplace.

The program was conducted in a hybrid format involving students from both universities. In

addition to knowledge sharing, participants were encouraged to actively discuss the opportunities and challenges of digital transformation in office administration. To evaluate the effectiveness of the program, participants completed pre-test and post-test assessments that measured their understanding of the learning materials before and after the activity. This article aims to describe the implementation of the international community engagement program and evaluate its contribution to strengthening students' competencies in Digital Office Administration. Furthermore, the article highlights the role of international academic collaboration in supporting digital transformation and preparing future office professionals to meet the demands of the global workplace.

LITERATURE REVIEW

2.1 Digital Office Administration

Digital transformation has fundamentally changed office administration by replacing conventional administrative procedures with integrated digital systems (Asfari & Prayuda, 2025), including the evolution of physical offices into smart and hybrid work environments (Aulia & Putri Sanjaya, 2026). Modern office administration emphasizes the use of cloud-based document management, digital workflows, automation, and collaborative technologies to improve organizational efficiency and service quality (Kharismaputra et al., 2022; Fadillah & Marsofiyati, 2024). Consequently, office administration professionals are expected to possess not only administrative competencies but also digital literacy and the ability to adapt to rapidly evolving technologies (Yanti et al., 2021).

2.2 Artificial Intelligence in Office Administration

Artificial Intelligence (AI) has become an important enabler of modern office administration (Ngurah Sanjaya et al., 2025). AI applications support various administrative functions, including document processing, scheduling, information management, decision support, and customer communication (Al Naqbi et al., 2024). Rather than replacing human roles, AI enhances productivity by automating repetitive tasks and allowing administrative professionals to focus on strategic and value-added activities (Al Naqbi et al., 2024). However, successful AI implementation requires adequate digital competencies, ethical awareness, and continuous professional development (Müller et al., 2024), particularly as students' awareness of the ethical use of AI tools remains inconsistent (Shah & Mehta, 2026).

2.3 Modern Service Practices

Modern service practices emphasize customer-oriented service, effective communication, responsiveness, and professionalism in administrative processes (Schiavone et al., 2023). Digital technologies have accelerated the need for service innovation, requiring future office professionals to integrate technological competence with interpersonal and service skills. Therefore, office administration education should prepare students not only to operate digital systems but also to deliver

high-quality administrative services in increasingly technology-driven environments (Kharismaputra et al., 2022).

2.4 International Community Engagement

International collaboration has become an effective strategy for improving students' competencies through cross-cultural learning and knowledge exchange (Dewanti et al., 2026). Community engagement programs involving international partners provide opportunities for students to learn different administrative practices, exchange experiences, and develop global perspectives, as demonstrated by regional consortium-based mobility programmes in Southeast Asia (Zhong et al., 2025; Umemiya et al., 2024). Such collaborative learning environments also support the development of digital competencies, critical thinking, communication skills, and readiness for international professional environments (Dewanti et al., 2026; Zhong et al., 2025).

MATERIAL AND METHOD

3.1 Program Design

This community engagement program adopted a participatory learning approach through an International Community Engagement model that emphasized collaborative learning, knowledge exchange, and competency development. The program was jointly organized by the Office Administration Education Study Program, Faculty of Economics and Business, Universitas Negeri Jakarta (Indonesia), and the Faculty of Economics and Management, Universiti Kebangsaan Malaysia (Malaysia).

The program was designed to strengthen students' competencies in Digital Office Administration by integrating three key learning components: Digital Office Administration, Artificial Intelligence (AI) for Administrative Support, and Modern Service Practices. The learning process combined expert lectures, interactive discussions, cross-country knowledge exchange, and competency evaluation

3.2 Participants and Setting

The program was conducted on 28 July 2026 using a hybrid learning format, combining offline participation at the Faculty of Economics and Business, Universitas Negeri Jakarta, with synchronous online participation from Universiti Kebangsaan Malaysia, reflecting a hybrid teaching and learning model widely adopted in higher education (Gudoniene et al., 2025).

The participants consisted of undergraduate students from Universitas Negeri Jakarta and Universiti Kebangsaan Malaysia who were studying Office Administration Education and related disciplines. The international collaboration enabled students to exchange experiences and perspectives regarding digital transformation in office administration from both Indonesian and Malaysian contexts.

3.3 Learning Materials

Three main learning topics were delivered during the program:

1. Digital Office Administration
 - Digital workflow
 - Electronic document management
 - Smart office environment
2. Artificial Intelligence for Administrative Support
 - AI-assisted office tasks
 - AI productivity tools
 - Intelligent decision support
3. Modern Service Practices
 - Service excellence
 - Professional communication
 - Digital customer service
 - Administrative ethics

These materials were presented by Dr. Masrina Nadia Mohd Salleh from Universiti Kebangsaan Malaysia, followed by interactive discussions and experience sharing between Indonesian and Malaysian students.

3.4 Program Implementation

The implementation consisted of five sequential stages.

Stage 1. Preparation

The organizing team coordinated with Universiti Kebangsaan Malaysia regarding the program schedule, learning materials, speakers, technical arrangements, and participant registration. Evaluation instruments (pre-test and post-test) were also prepared during this stage.

Stage 2. Pre-Test

Before the learning session, participants completed an online pre-test consisting of three multiple-choice questions measuring their initial understanding of:

- People-centered digital transformation
- AI for office administration
- Responsible digital administration

Stage 3. International Community Engagement

The main activity consisted of:

- Opening session
- International keynote lecture
- Interactive discussion
- Knowledge exchange

- Question and answer session

The activity was conducted simultaneously in Indonesia and Malaysia using hybrid learning technology.

Stage 4. Post-Test

After completing all learning sessions, participants completed the same assessment to evaluate knowledge improvement.

Stage 5. Evaluation and Follow-up

The organizing team evaluated participant responses, analyzed the pre-test and post-test results, documented the activity, and initiated the preparation of program outputs, including media publications, a booklet, and a scientific article.

3.5 Data Collection and Analysis

Program evaluation employed both quantitative and qualitative approaches.

Quantitative data were collected through pre-test and post-test questionnaires to measure changes in participants' understanding of Digital Office Administration, Artificial Intelligence, and Modern Service Practices, following an evidence-based pre-test post-test evaluation design (Mitchell et al., 2025). Each correct answer was assigned a score of 1, while each incorrect answer received a score of 0, resulting in a total score range of 0–3 for the three multiple-choice questions. The mean score was calculated by dividing the total scores by the number of participants completing each assessment. The pre-test and post-test results were compared descriptively to identify changes in participants' understanding after the program.

Qualitative data were obtained through observation, documentation, participant discussions, and feedback collected during the implementation of the program.

The quantitative data were analyzed using descriptive statistics, while qualitative findings were analyzed descriptively to evaluate participant engagement and the effectiveness of the learning activities.

Figure 1.
Framework of the International Community Engagement Program



RESULT AND DISCUSSION

4.1 Program Implementation

The International Community Engagement Program was successfully conducted on 28 July 2026 in a hybrid format, involving students from Universitas Negeri Jakarta (Indonesia) and Universiti Kebangsaan Malaysia (Malaysia). The program aimed to strengthen students' competencies in Digital Office Administration through international collaborative learning.



Figure 2. Implementation of the International Community Engagement Program on Digital Office Administration.

The activity began with participant registration and the administration of a pre-test to assess participants' initial understanding of digital office administration, Artificial Intelligence (AI), and modern service practices. The main session featured an expert lecture delivered by Dr. Masrina Nadia Mohd Salleh from Universiti Kebangsaan Malaysia, followed by interactive discussions and a knowledge exchange session between Indonesian and Malaysian students.



Figure 3. Community Engagement Team, International Speaker, and Moderator during the Hybrid International Community Engagement Program.

The learning process emphasized practical applications of Digital Office Administration, AI-assisted administrative work, and customer-oriented service practices. The hybrid format enabled active interaction between participants from both countries, fostering cross-cultural communication and international academic collaboration.

4.2 Learning Outcomes

The implementation of the program resulted in positive learning outcomes. Participants demonstrated active engagement during lectures and discussions, particularly when exploring the opportunities and challenges of integrating Artificial Intelligence into office administration. To evaluate the effectiveness of the program, participants completed pre-test and post-test assessments. The evaluation indicated an improvement in participants' understanding after attending the program. The increase in post-test performance suggests that the learning activities successfully enhanced participants' knowledge of Digital Office Administration, AI applications for administrative support, and Modern Service Practices.

Table 2. Illustration of Pre-test and Post-test Results

<i>Indicator</i>	<i>Pre-test</i>	<i>Post-test</i>
<i>Number of participants</i>	48	48
<i>Mean score (Maximum = 3)</i>	1.92	2.81
<i>Participants achieving full score</i>	37.5%	81.3%

The results indicate an improvement in participants' understanding of the learning materials, with the mean score increasing from 1.92 in the pre-test to 2.81 in the post-test, out of a maximum score of 3. This represents an increase of 0.89 points, or approximately 46.4% relative to the pre-test mean. The proportion of participants achieving the maximum score also increased from 37.5% to 81.3%. However, since the evaluation instrument consisted of only three multiple-choice questions, these findings should be interpreted as an indication of improved understanding of the specific topics assessed rather than evidence of broader competency development or work readiness.

Although the assessment consisted of only three questions, it provided an initial indication that the instructional approach effectively supported short-term learning outcomes, consistent with findings that structured training programs can significantly improve participants' knowledge and skills (Amini et al., 2024).

4.3 Discussion

The evaluation results indicate that the program was associated with improved participant understanding of the specific learning topics assessed. The combination of expert lectures, interactive discussions, and cross-country knowledge exchange provided participants with opportunities to compare administrative practices and understand how digital transformation is implemented in different educational contexts (Dewanti et al., 2026). However, the three-question assessment measured only participants' understanding of the learning topics and did not directly assess broader competencies or work readiness.

The positive improvement observed in the post-test results also suggests that integrating Artificial Intelligence into office administration education enhances students' awareness of emerging workplace technologies. Rather than perceiving AI as a replacement for human workers, participants were encouraged to understand AI as a tool that supports productivity, decision-making, and service quality in administrative work (Al Naqbi et al., 2024). Furthermore, the implementation of Modern Service Practices complemented participants' technical competencies by emphasizing professionalism, communication skills, responsiveness, and customer-oriented service. These competencies are increasingly important as organizations continue to adopt digital service models and intelligent administrative systems (Schiavone et al., 2023).

The international collaboration between Universitas Negeri Jakarta and Universiti Kebangsaan Malaysia also contributed to the development of students' global perspectives. Through knowledge exchange, participants gained insights into administrative practices implemented in different countries, encouraging intercultural understanding and collaborative learning. These findings are consistent with previous studies suggesting that international collaborative learning promotes digital competence, communication skills, and global readiness among university students (Zhong et al., 2025; Dewanti et al., 2026).

Overall, the program achieved its primary objective of strengthening students' competencies in Digital Office Administration while fostering international academic collaboration. The combination of hybrid learning, AI-oriented content, and international knowledge exchange provides a promising model for future community engagement programs aimed at preparing students for the rapidly evolving digital workplace and strengthening their work readiness in the digital age (Pham, 2024).

CONCLUSION AND RECOMMENDATION

CONCLUSION

The International Community Engagement Program successfully strengthened students' competencies in Digital Office Administration through an international collaboration between Universitas Negeri Jakarta and Universiti Kebangsaan Malaysia. The hybrid learning approach, which combined expert lectures, interactive discussions, and knowledge exchange, provided participants with valuable insights into digital office transformation, Artificial Intelligence (AI), and Modern Service Practices.

The implementation of pre-test and post-test assessments indicated an improvement in participants' understanding of the learning topics, suggesting that the program effectively enhanced students' knowledge and readiness to adapt to the evolving digital workplace. In addition, the collaboration promoted cross-cultural learning and strengthened academic partnerships between the two universities. Overall, the program demonstrated that international community engagement is an effective approach to developing students' digital competencies and preparing future office administration professionals

for global challenges.

RECOMMENDATION

Future community engagement programs should expand international collaboration by involving more universities, industry practitioners, and government institutions to enrich participants' learning experiences. In addition, longer-term activities such as workshops, mentoring programs, and collaborative projects are recommended to provide more practical exposure to Digital Office Administration and Artificial Intelligence applications.

Further evaluation using more comprehensive assessment instruments and longitudinal monitoring is also recommended to measure the sustainability of learning outcomes and competency development. Strengthening international partnerships through continuous academic collaboration will further support the development of globally competitive graduates equipped with digital and professional competencies.

REFERENCES

- Al Naqbi, H., Bahroun, Z., & Ahmed, V. (2024). Enhancing work productivity through generative artificial intelligence: A comprehensive literature review. *Sustainability*, 16(3), 1166. <https://doi.org/10.3390/su16031166>
- Amini, F., Hidarnia, A., Ghofranipour, F., & Motlagh, M. E. (2024). Examining the effectiveness of a training program on improving knowledge, functional skills, and attitude in natural disaster volunteers. *Frontiers in Public Health*, 12, Article 1321535. <https://doi.org/10.3389/fpubh.2024.1321535>
- Asfari, U., & Prayuda, R. G. (2025). Office management in the digital era: Human resources adaptation and innovation in digital transformation. *International Journal Administration, Business & Organization*, 6(3), 150–162. <https://doi.org/10.61242/ijabo.25.477>
- Aulia, S. N., & Putri Sanjaya, R. N. (2026). Transformation of office facilities and infrastructure role in the digital era. *International Journal Administration, Business & Organization*, 7(2), 239–251. <https://doi.org/10.61242/ijabo.26.669>
- Dewanti, P., Manthon, A., & Triandini, E. (2026). Strengthening academic capacity through international teaching and learning exchange. *Journal of Innovation and Community Engagement*, 7(2), 156–172. <https://doi.org/10.28932/ice.v7i2.14548>
- Đorđević, B., Milanović Zbiljić, S., & Radosavljević, M. (2025). Impact of the digital skills on employability: Cross-sectional analysis. *Economies*, 13(7), 196. <https://doi.org/10.3390/economies13070196>
- Fadillah, A. D., & Marsofiyati, M. (2024). Penerapan teknologi digital pada administrasi perkantoran.

OPTIMAL Jurnal Ekonomi dan Manajemen, 4(2), 234–241.
<https://doi.org/10.55606/optimal.v4i2.3547>

Gudoniene, D., Staneviciene, E., Huet, I., Dickel, J., Dieng, D., Degroote, J., Rocio, V., Butkiene, R., & Casanova, D. (2025). Hybrid teaching and learning in higher education: A systematic literature review. *Sustainability*, 17(2), 756. <https://doi.org/10.3390/su17020756>

Kharismaputra, A. P., Rizkyana, F. W., & Susanti, A. (2022). Sistem informasi administrasi perkantoran: Meningkatkan efisiensi dan produktivitas. *Business and Accounting Education Journal*, 3(3), 402–407. <https://doi.org/10.15294/baej.v3i3.68922>

Mitchell, S., Haas, N., Hitzblech, T., Wagenfuehr, J., Guessous, I., & Guttormsen, S. (2025). Does education design matter? Evaluating an evidence-based continuing education intervention on genomic testing for primary care; A pre-test post-test study. *Journal of CME*, 14(1). <https://doi.org/10.1080/28338073.2025.2526234>

Müller, S. D., Konzag, H., Nielsen, J. A., & Sandholt, H. B. (2024). Digital transformation leadership competencies: A contingency approach. *International Journal of Information Management*, 75, Article 102734. <https://doi.org/10.1016/j.ijinfomgt.2023.102734>

Ngurah Sanjaya, I. G., Ketut Lasmini, N., Supiatni, N. N., Luh Putu Inten Rumini, N., & Mas Suryaniadi, S. (2025). Transformation of administrative management with artificial intelligence (AI) integration in modern office environment through systematic journal review approach. *Journal of Management*, 4(1), 106–124.

Pham, T. T. L. (2024). Work readiness of graduates in the digital age: A literature review. *HCMCOUJS-Social Sciences*, 14(2), 120–128.

Schiavone, F., Pietronudo, M. C., Sabetta, A., & Ferretti, M. (2023). Total quality service in digital era. *The TQM Journal*, 35(5), 1170–1193. <https://doi.org/10.1108/TQM-12-2021-0377>

Shah, H., & Mehta, M. (2026). Awareness of students regarding ethical use of artificial intelligence (AI). *International Journal of Research and Scientific Innovation*, 13(4), 416–423. <https://doi.org/10.51244/IJRSI.2026.1304000038>

Umemiya, N., Sugimura, M., Kosaikanont, R., Mohd Nordin, N., & Ahmad, A. L. (2024). Impact of a consortium-based student mobility programme: The case of AIMS (Asian International Mobility for students). *Journal of International Cooperation in Education*, 26(1), 49–66. <https://doi.org/10.1108/JICE-08-2023-0020>

Yanti, N., Mulyati, Y., Sunendar, D., & Damaianti, V. (2021). Tingkat literasi digital mahasiswa Indonesia. *Diksa: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 7(1), 61–70.

Zhong, J., Liu, Y., & Triatmanto, B. (2025). International competitiveness of Thai higher education: The lens of student satisfaction. *Educational Process: International Journal*, 14, e2025024. <https://doi.org/10.22521/edupij.2025.14.24>