Educational Technology-Based Strategies for The Internationalization of Islamic Higher Education in Indonesia and Brunei Darussalam

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Abstract

This study aims to analyze the strategy of internationalization of Islamic higher education through the use of educational technology towards achieving a world-class university status in two universities: the State Islamic University of Maulana Malik Ibrahim, Malang, Indonesia, and Sultan Syarif Ali University, Brunei Darussalam. This paper uses a case study approach with a qualitative method. Data collection was carried out through interviews, observations, and documentation. Regarding data analysis, the researcher reduces the data, presents it, and draws conclusions. Verification is used for comparison between case studies. Additionally, this study employs triangulation of sources and methods to validate its findings. The results of the study show that the development strategy of Internationalization of Islamic Higher Education with the use of educational technology aims to prepare graduates who are relevant to current needs and able to compete in the era of globalization with the following steps: integrating technology in the learning process through educational technology using Learning Management System, E-learning, blended learning, and holding conferences with the system hybrid, online learning platform and digitization of administrative systems, conducting quality evaluations and audits, developing international collaboration programs and adapting the curriculum to global standards, developing networks between universities in Asia in strengthening international relations and cooperation.

Keywords: *Educational Technology, Internationalization of Islamic Higher Education*

Abstrak

Penelitian ini bertujuan untuk mengalisis bagaimana strategi internasionalisasi pendidikan tinggi Islam dengan menggunakan teknologi pendidikan menuju universitas kelas dunia pada dua perguruan tinggi di Universitas Islam Negeri Maulana Malik Ibrahim Malang Indonesia dan Universitas Sultan Syarif Ali Brunei Darusslam. Tulisan ini menggunakan pendekatan studi kasus dengan metode kualitatif. Pengumpulan data dilakukan melalui wawancara, observasi, dan dokumentasi. Mengenai analisis data, peneliti melakukan reduksi data dan penyajian data serta menarik kesimpulan, verifikasi digunakan untuk perbandingan antar studi kasus. Selain itu, juga menggunakan triangulasi sumber dan metode untuk memvalidasi temuan dalam penelitian ini. Hasil penelitian menunjukkan bahwa strategi pengembangan Internasionalisasi Pendidikan Tinggi Islam dengan penggunaan teknologi pendidikan bertujuan untuk menyiapkan lulusan yang relevan dengan kebutuhan saat ini dan mampu bersaing di

era globalisasi dengan langkah-langkah sebagai berikut: mengintegrasikan teknologi dalam proses pembelajaran melalui teknologi pendidikan menggunakan Learning Management System, E-learning, pembelajaran blended learning, pelaksanaan konferensi dengan sistem hybrid, platform pembelajaran daring dan digitalisasi sistem administrasi, melakukan evaluasi dan audit mutu, mengembangkan program kolaborasi internasional dan menyesuaikan kurikulum dengan standar global, pengembangan jejaring antar universitas di Asia dalam memperkuat hubungan dan kerjasama internasional.

Kata Kunci: *Teknologi Pendidikan, Internasionalisasi Perguruan Tinggi Islam*

INTRODUCTION

Islamic higher education has now entered a new era, namely a competitive era full of challenges due to the rapid flow of globalization (Hadisi & others, 2025; Rekan et al., 2025; Shofiyyah et al., 2023; Suwendi et al., 2024). The challenges and fierce competition in this global era demand the availability of quality and competent human resources, able to respond to problems while taking advantage of existing opportunities. The experience of developed countries in Asia such as Japan, South Korea, and Malaysia shows that the provision of quality higher education has a significant correlation with the overall improvement of human resource competence, which ultimately strengthens global competitiveness. In this context, Islamic higher education in Indonesia and Brunei Darussalam is one of the important elements in encouraging the progress and welfare of the community.

Globalization as an economic, political, and social force has encouraged 21st-century higher education to be more actively involved in the international arena. Global capital invests heavily in the knowledge industry in various parts of the world, including in the Islamic higher education sector in Indonesia and Brunei Darussalam (Knight & De Wit, 2018; Rensburg et al., 2015). (This investment is an indicator of the birth of a knowledge-based society, the revival of the service sector, and the dependence on knowledge-based products and a highly educated workforce that supports economic growth (Hasanudin et al., 2024). Globalization, although it brings opportunities, cannot be considered a neutral concept because it leaves a variety of political, social, and economic implications.

In the field of higher education, globalization encourages the emergence of collaboration and competition between universities at the world level. Governments in various countries have responded proactively to this challenge through international cooperation in teaching, research, and community service (Aziz et al., 2025; Khoiruddin & Takhmid, 2024). This international collaboration is carried out by integrating a global perspective into the main functions of higher education institutions.

One of the main strategies in facing global challenges is the internationalization of higher education. Internationalization is a means to increase the competitiveness of a nation in the global arena, while maintaining national identity. Previous studies (Horie, 2002; Hwami et al., 2024; Xu, 2023) shows that universities in developed countries such as the United States, the United Kingdom, Canada, and Australia that have high levels of internationalization tend to have several distinctive characteristics: diverse sources of income, high annual fund turnover, contribution to local and regional economic development, a more diverse workforce, and the ability to attract international staff and students (Chang, 2015; Seeber et al., 2016)

A study of 17 universities around the world concluded that the implementation of internationalization requires support from various aspects: internationally oriented study programs, cross-border institutional relations, student and staff exchange programs, international research collaboration, and adequate support for international students. Educational technology-based strategies are also key in supporting the internationalization process, especially in today's digital era. The use of online learning platforms, learning management systems (LMS), and cross-border virtual collaboration allows universities in Indonesia and Brunei Darussalam to reach global partners more efficiently. In addition, the use of educational technology accelerates access to international academic resources and supports the mobility of students and lecturers in digital formats, including online-based exchange and joint research programs.

Internationalization brings many benefits, including improving the reputation of institutions, opening access to new competitive markets, strengthening international research networks, increasing the competence of graduates in facing the global job market, and increasing the capacity of academic staff (Bowman & Bastedo, 2013; Uslu, 2020). For developing countries, internationalization is more focused on achieving academic and cultural goals, such as improving the quality of education and meeting the demands for higher education quality (Ma & Yue, 2015).

In Indonesia, the internationalization policy is reflected in the Long-Term Higher Education Strategy and planning documents such as the National Education Strategic Plan 2010–2014 and the Strategic Plan of the Ministry of Research, Technology and Higher Education 2015–2019. Internationalization is positioned as a means of increasing national competitiveness, one of which is through involvement in the global ranking of universities. In this context, educational technology plays a strategic role as a catalyst for internationalization, such as through the digitization of the curriculum, the development of blended learning programs, and the implementation of an international-based academic information system. In addition, in Brunei Darussasalam uses open education resources (OER) which are used to support open education. Therefore, higher education institutions, including those in Indonesia and Brunei Darussalam, need to actively integrate technology in their internationalization strategies to expand their global reach, efficiency, and appeal.

In line with the results of previous research, this study aims to examine the internationalization strategy of Islamic universities in Indonesia and Brunei Darussalam in an effort to achieve World Class University status. In contrast to previous research that has more highlighted the internationalization of higher education in general, this study offers a more specific perspective on the context of Islamic colleges. This focus is a significant aspect of novelty because it considers Islamic values, a distinctive academic governance system, and the challenge of conforming to global standards without losing Islamic and local identity.

In addition, this study also provides a deeper comparative analysis of how internationalization policies in Indonesia and Brunei Darussalam can increase the competitiveness of Islamic universities in the global realm. Although globalization and internationalization open up great opportunities, Islamic universities in both countries still face various obstacles, such as limited funding, infrastructure, and internationally competent human resources. The lack of global collaboration and regulatory constraints, including the

accreditation system and recognition of international diplomas, are also obstacles to the development of institutions.

External factors such as increasing global competition, differences in educational standards, and differences in academic culture also add to the complexity of the challenges faced. Therefore, a more adaptive and progressive strategy is needed to strengthen international cooperation, improve the quality of academic human resources, and formulate policies that support internationalization without ignoring Islamic identity as the main characteristic of Islamic universities.

METHODS

This study uses a qualitative approach with a case study method to uncover the strategy of internationalization of Islamic higher education in order to become a World Class University in two leading Islamic universities, namely the State Islamic University Maulana Malik Ibrahim Malang, Indonesia, and the Sultan Sharif Ali University (UNISSA), Brunei Darussalam. This approach was chosen because it allows researchers to explore in depth the ongoing and contextual phenomenon, namely the implementation of internationalization in Islamic higher education institutions. Case studies are considered relevant for understanding phenomena in real-life contexts, especially when the boundaries between phenomena and contexts are not entirely clear (Davids et al., 2025; Patton, 2014)

The location of the research was determined purposively based on the activeness of the two universities in developing internationalization programs, as well as the distinctive characteristics of both universities that integrate Islamic values in governance and academics. The research subjects consisted of three categories, namely internationalization program managers (6 people from State Islamic University Maulana Malik Ibrahim Malang and 4 from UNISSA), lecturers and academic supervisors (3 from State Islamic University Maulana Malik Ibrahim Malang and 2 from UNISSA), and students participating in international programs (6 from State Islamic University Maulana Malik Ibrahim Malang and 4 from UNISSA). The selection of informants is carried out purposively, namely based on their direct involve (Patton, 2014) mean in the process of planning, implementing, and evaluating internationalization programs at each university.

Data was collected through three main techniques, namely in-depth interviews, observations, and documentation. The interviews were conducted to explore information related to the concept and practice of internationalization from the perspective of policy makers and program implementers. Observations were made on various activities that reflected the internationalization strategy, such as the teaching and learning process in the international classroom, discussions in the incubator room, workshops, student mobility festivals, and program presentations. Documentation is done by examining various official documents, such as academic catalogs, work programs, activity reports, and information available on each university's website.

Data analysis was carried out simultaneously during the data collection process, using the Miles and Huberman model which includes three main stages: data reduction, data presentation, and conclusion drawn. Data reduction is carried out to filter information relevant to the focus of the research, the presentation of data is arranged in the form of narratives and

thematic findings, while conclusions are drawn systematically by re-verifying the data that has been analyzed. The validity of the data is maintained through triangulation techniques and source triangulation, to ensure that the findings reflect the true reality and are unbiased. This triangulation technique involves comparing the results of interviews, observations, and documentation, as well as comparing information from different groups of informants (Hammarberg et al., 2016; Sofaer, 2002)

RESULTS AND DISCUSSION

The results of the study show that the strategy for developing the internationalization of Islamic higher education implemented by State Islamic University Maulana Malik Ibrahim Malang and Sultan Sharif Ali University (UNISSA) is consistently directed at the integration of educational technology in response to the challenges of globalization and digital transformation. This effort not only focuses on the technical aspects of teaching and learning, but also summarizes a holistic approach to the internationalization of Islamic higher education. The results of the research on curriculum internationalization are presented in the table. 1

Table. 1 Comparison of Internationalization of Curriculum in Islamic Universities

Aspects	State Islamic University Maulana Malik Ibrahim Malang	Sultan Sharif Ali University (UNISSA)
Curriculum Design	- Referring to KKNI and OBE - Use of English in international class or ICP - Integration of Islamic and globalization courses	- Refers to the Brunei Darussalam Qualifications Framework (BDQF) - Use of Arabic and English as an introduction - Inserting the values of MIB (Malay Islamic Monarchy)
Learning Implementation	- The presence of an active ICP class - Holding seminars by presenting guest lectures from partner universities	- Holding seminar and webinar cooperation with overseas partner universities - The existence of international recognition cooperation
Internationalization strategy based on educational technology	- Learning system with blended learning and LMS or E-Learning	- Use of OER to support open education
Model Pedagogic	- Integrative between science and Islam - Student-centered learning and collaborative	- Islamic values based on local culture - Project-based and discussion of sharia values
Accreditation Strategy	- Towards international accreditation: AUN-QA, FIBAA	- Focus on the Islamic Quality Assurance Framework (IQAF)

	- Quality audit through LPM and BAN-PT	- Assessment by the Brunei Council of Higher Education
Graduate Outcomes	- Graduates have global competence and high digital literacy - Competitiveness for further study abroad increased	- Graduates have excellence in the field of contemporary Islam and local-global culture - Increased Attractiveness for ASEAN Students

The results of the study show that the two institutions, namely State Islamic University Maulana Malik Ibrahim Malang and Sultan Sharif Ali University (UNISSA) Brunei Darussalam, have developed an international curriculum design that is in line with the direction of globalization of higher education, without abandoning the Islamic identity of their respective institutions. At State Islamic University Maulana Malik Ibrahim Malang, the curriculum is designed with reference to the Indonesian National Qualifications Framework (KKNI) and the Outcome-Based Education (OBE) approach which emphasizes global competency-based learning outcomes. This approach allows students to have critical thinking skills, cross-cultural communication, and mastery of technology. To support the implementation of the International Class Program (ICP), a number of courses are delivered in English, both full and mixed, to improve students' ability to compete at the international level. This aims to obtain graduates who have global competence and are expected to be able to have high digital literacy skills. Mastery of learning technology and academic experience is expected to be able to support graduates to enter the world of work.

On the other hand, State Islamic University Maulana Malik Ibrahim Malang develops a curriculum that integrates Islamic values with global issues. This can be seen from the existence of courses such as contemporary Islamic thought, global ethics, and Islamic studies combined with modern contexts, such as Islamic digital economy and Islamic diplomacy. This approach aims to produce graduates who are not only religious, but also adaptive to global change.

Meanwhile, Sultan Sharif Ali University developed its curriculum by referring to the Brunei Darussalam Qualifications Framework (BDQF) which is the national standard for higher education (Shahrill & Keasberry, 2024). This curriculum is implemented in two main languages, namely Arabic for strengthening Islamic science and English for global communication. In addition, Sultan Sharif Ali University inserts the values of the Malay Islamic Monarchy (MIB) in various courses, both directly and contextually (Muhammad & Baihaqy, 2021). MIB values are used as a moral, cultural, and nationalistic framework that strengthens the character of students in the midst of globalization challenges(Rahman et al., 2023). This advantage makes Sultan Sharif Ali University graduates not only relevant in the local context of Brunei, but also able to contribute to the international Islamic discourse, especially in the Southeast Asian region. The attractiveness of Sultan Sharif Ali University has also increased in the eyes of students from ASEAN countries who are looking for quality Islamic education with a moderate approach and based on cultural values.

In terms of learning implementation, both institutions have demonstrated a commitment to the internationalization of the curriculum through innovative pedagogical

practices and based on global collaboration. At State Islamic University Maulana Malik Ibrahim Malang, international classes or ICP are active, with students participating in learning using the blended learning model, which combines face-to-face and online learning through the Learning Management System (LMS). This e-learning system is used to provide teaching materials, discussion forums, and online evaluations that can be accessed flexibly by students. In addition, State Islamic University Maulana Malik Ibrahim Malang regularly organizes international seminars and guest lectures by inviting lecturers from foreign partner universities, in order to broaden students' horizons and strengthen global academic networks.

Meanwhile, Sultan Sharif Ali University implements international learning through collaboration with foreign institutions in the form of seminars, webinars, and joint lectures. This activity is carried out by utilizing remote communication technology, allowing students and lecturers to interact with the international academic community without having to do physical mobility. In addition, Sultan Sharif Ali University actively builds academic recognition cooperation internationally, which allows learning outcomes and degrees to be recognized across countries. In supporting the principle of open education, Sultan Sharif Ali University also uses Open Educational Resources (OER) to provide wider and more inclusive access to learning for all students.

Both institutions utilize educational technology as part of their internationalization strategy. State Islamic University Maulana Malik Ibrahim Malang initiated hybrid conferences, lecturer teaching abroad, and research cooperation through collaborative proposal writing with international partners. Information technology plays a key role in expanding collaboration, strengthening global academic communication, and creating the university's image as a world-class institution. Sultan Sharif Ali University has also developed a similar strategy by utilizing digital platforms for cross-border academic interactions, as well as making technology the main tool in supporting recognition cooperation and inter-institutional connectivity.

The development of collaborative programs, such as holding hybrid conferences, that utilize educational technology can have a good positive impact on the university. By expanding collaboration and communication between faculty and international partners, universities can improve academic quality and enrich the curriculum with a global perspective. In addition, increasing the number of collaborative programs, such as co-funding proposal writing, is also an important step in supporting international research. All of this is a strategic effort to increase the competitiveness of universities at the global level, create a dynamic academic environment, and be able to produce research and innovations that can make a positive contribution both at the national and international levels.

The results of in-depth interviews with International Class Program students benefit from academic development, communication skills, and global insights, which are opportunities for students to build networks. Students can attend conferences internationally and meet with students or other speakers from different nationalities to understand the conditions and problems in other countries firsthand. According to them, this is a great capital for the future leader of this nation. Information and communication technology has made it easier for them to establish friendships and good relationships. The impact of this friendship network is not only for the two collaborating universities, but also involves other universities and other countries. For example, some students from this program bring their friends to visit and study

directly at the State Islamic University of Maulana Malik Ibrahim Malang and the Islamic University of Sultan Shariff Ali Brunei Darussalam, both through internship and research programs.

The cooperation that has been built is a cooperation based on friendly relations, the progress of the State Islamic University of Maulana Malik Ibrahim Malang and the Islamic University of Sultan Syarif Ali Brunei Darussalam, mutually beneficial with domestic and foreign institutions in the context of the advancement of education, research development, service and reconstruction of Islamic civilization, Therefore, the State Islamic University of Maulana Malik Ibrahim Malang and the Islamic University of Sultan Syarif Ali Brunei Darussalam It is very important to evaluate the implementation of cooperation with foreign partners. As a sustainability measure, the evaluation of the internationalization program is carried out periodically to ensure the effectiveness of the strategy implemented. This evaluation covers various things, from the curriculum, the educational technology used, the pedagogical model. With good evaluation, policy improvements can be made appropriately to adapt to global developments and the challenges faced. In addition, strengthening cooperation with universities in the Asian region and the world also continues to be developed, both through credit transfer programs, double degrees, and the organization of joint conferences and publications. With a directed strategy and continuous evaluation, State Islamic University Maulana Malik Ibrahim Malang and Sultan Sharif Ali University strive to strengthen their role as a center for superior and globally competitive Islamic higher education.

Furthermore, the internationalization strategy that has been carried out by State Islamic University Maulana Malik Ibrahim Malang and Sultan Sharif Ali University Brunei Darussalam is also in line with the policy direction of developing higher education cooperation launched by the Ministry of Research, Technology, and Higher Education in facing the ASEAN Economic Community (AEC). One form of implementation is through the implementation of an international curriculum that is balanced with the use of educational technology as the main support for the cross-border learning process. At State Islamic University Maulana Malik Ibrahim Malang, the implementation of the Learning Management System (LMS) allows students and lecturers to carry out learning flexibly and integrated, while at Sultan Sharif Ali University, the use of Open Educational Resources (OER) expands access to open and inclusive learning resources (Beaudonnet & Dupuy, 2023; Chao, 2023). Although these various initiatives have been running with various advantages and challenges, every weakness that exists is always improved and developed along with the times to support the sustainability of curriculum implementation and the use of educational technology (Iqbal et al., 2025; Schwarz & Westerheijden, 2004; Tepelena, 2024)

In addition, strengthening the internationalization program needs to be directed at optimizing the role of the faculty in actively establishing international collaboration, both through the use of existing networks and by initiating new cooperation independently. One strategy that can be done is to attract more international students through improving the quality of technology-based learning programs and developing curricula that are relevant to global needs (Suyantiningsih et al., 2023) In this context, collaboration between Indonesian universities and foreign partners can act as a globalization agent and a strategic instrument of internationalization. Programs such as international conferences need to be carefully formulated

so that the provision of global education services not only expands access, but also maintains national cultural sovereignty and supports the independence of science and technology in developing countries (Hegazy et al., 2025; Marlia et al., 2025; Sok & Bunry, 2021)

The results of further research on the implementation of international classes at the State Islamic University of Maulana Malik Ibrahim Malang and the Islamic University of Sultan Shariff Ali Brunei Darussalam show that the implementation of the International Class program and the use of educational technology to prepare graduates who are globally competitive with the following steps:

Setting the vision to become a superior university in Southeast Asia(Tucker et al., 2025). The vision of the State Islamic University of Maulana Malik Ibrahim Malang is: To become a superior, reliable, competitive, and internationally reputable Islamic university. Implementing the Tridharma of superior universities which includes education, research, and community service. The vision of Sultan Shariff Ali Islamic University Brunei Darussalam is: "To become an Islamic university that excels in producing quality human resources who have faith, knowledge in the development of science and technology as well as art and culture with noble character based on the values of *Ahlusunnah wal Jamaah* (Aswaja)." The view of education must be shifted from just fulfilling economic needs, it must become a new view, that education is also a development strategy for the future civilization of a nation. Education is essentially a human investment, so it can be concluded that education must be an important asset in the development process (Kousar et al., 2023; Pavel & Isak, 2021; Shavkidinova et al., 2023). The vision to achieve a superior level in Southeast Asia is both a challenge and an opportunity for the academic community to exist in the global era. Every policy and program that is implemented refers to this vision.

In Indonesia, it is necessary to choose quality input from prospective students; Selection is made for students who will take part in international class programs. The selection includes two main competencies, namely English language proficiency and academic achievement index(Li et al., 2025). The selection team conducted an authentic assessment of the candidates' files and interviewed their interests and ability to use English. The input selection process for quality students aims to capture the interests and abilities to participate successfully in this program(Thessin et al., 2024). In contrast to students in Brunei they are not just chosen, but students in Brunei tend to be driven also by internal motives such as self-development and personal satisfaction, with government support and scholarship programs playing an important role in their motivation (Murharyana et al., 2024; Muthohar et al., 2025; Rofiq et al., 2025).

Thus, the program that will be implemented is effective and produces quality as expected. To get students with the best talent, the management can do it with a selection system that considers quality and quality, not the target quantity of students (Angreani & Vijaya, 2017; Brooks et al., 2024; Hassan et al., 2011; Woo, 2023) Including great students and then carrying out a professional educational learning process at educational institutions for great education personnel will produce great graduates to educate great nation's children towards a golden Indonesia in 2045. Students who have high competence will certainly improve the quality of learning, and in the end will improve the quality of human resources produced by the learning process (Amutuhaire, 2024; Bulut-Sahin et al., 2023)

The learning process applies a foreign language; The main problems faced in this country are the low competence of learning design, research competence and English proficiency(Kim et al., 2022; Lee et al., 2020), Through this international class, students are motivated to be able to master and communicate in English actively. English is used as the language of instruction in learning activities in international classroom programs. This can be seen from daily learning activities, such as presentations, teaching materials, evaluation, and interaction. To strengthen the participants' English skills, native speakers are brought in from abroad. The learning process applies English in its entirety, as a global instrument of world languages. English is used both orally and in writing by lecturers and students. Using English, students are given the challenge of preparing themselves as prospective teachers. Initial teacher training should be seen as the initial stage in preparing for professional teacher education(Breznik et al., 2023; Fitriati et al., 2024; Mutton & Burn, 2024; Susilawati et al., 2023). So that the updating and development of general and pedagogic science, which has been continuously developed in line with various new challenges in the world of education, tends to be able to fully uncover the professional abilities and efficiency of future teachers(Shields & Lu, 2023). This of course must be supported by teachers who have good English skills.

In addition, the use of educational technology in student learning in Indonesia has great potential to improve the quality of education and expand accessibility. The use of Learning Management Systems (LMS), video conferencing, and mobile learning has helped create a flexible and interactive learning environment. As has been done at State Islamic University Maulana Malik Ibrahim Malang, utilizing e-learning that can make it easier for lecturers to provide materials, make it easier to hold exams online, and can manage communication between students and lecturers through the discussion feature. In addition, Sultan Sharif Ali University Brunei Darussalam utilizes OER or Open Education Resource which can be used for training program or course providers since 2017. A training platform for the general public to increase productivity, motivation, and create opportunities to learn new skills and knowledge based on the teachings of the Qur'an and al-Sunnah. Not only that, but it can also be used to provide continuous educational opportunities to improve knowledge, skills and competencies in order to enhance personal or professional development; to build comprehensive professional programs for the public and private sectors. The use of technology is not only carried out in the implementation of learning, but also in administrative management. Various research files, student data, and repositories are also managed using technology.

The application of educational technology is highly relevant to the TPACK (Technology-based Pedagogy for Academic Collaboration and Knowledge-sharing) framework, which emphasizes the integration of technology in pedagogical development, academic collaboration, and cross-border knowledge exchange. In the context of State Islamic University Maulana Malik Ibrahim Malang and UNISSA, the use of technology such as LMS and OER can be seen as part of the TPACK approach that encourages inter-university connectivity, cross-cultural learning, and open sharing of academic resources. By adopting the TPACK principle, Islamic higher education institutions can strengthen their internationalization strategies in a sustainable and technology-based manner, while creating an educational model that is adaptive to the challenges of the digital era and globalization (Susilawati et al., 2025).

Carry out replenishment collaborations for students at schools and universities abroad. For students who take this program, they are given the opportunity to take internship programs at universities and International Class programs abroad. In 2019, one recharge student was selected to leave for Thailand and in 2023 to Malaysia. Replenishment is also carried out through various lectures by experts or native speakers or public seminars that are routinely held every month, both from within and outside the country (Indonesia, Malaysia, Brunei Darussalam, Thailand, Australia, and others). Another form of replenishment, students are actively involved in organizing international conferences.

Developing networks between universities in Asia to strengthen global ties, various academic collaborations have been developed, such as a shared curriculum and Cooperation (Zhuang et al., 2025). Implementing with foreign universities is a tangible manifestation of the physical and mental readiness of international class program participants and the realization of university internationalization in moving towards Word Class University (Zhu & Gu, 2024). Meanwhile, the development of inter-university networks in Asia will open up various joint steps to make this program a success. This is a real step in great management and is open to developments outside the usual environment. The dynamics of education in the era of knowledge demand the development of modern and professional education with educational nuances (Atstsaury et al., 2024; Qamariah & Hercz, 2025; Zamiri & Esmaeili, 2024). Educational institutions are expected to be able to carry out their roles effectively with advantages in the application and development of the curriculum, the use of educational technology, the application of pedagogical models (Mayger & Provinzano, 2021). Article 90 of Law Number 12 of 2012 concerning Higher Education states that universities abroad can provide higher education in the territory of Indonesia by collaborating with universities in Indonesia and with government permission. In response to this, universities can implement and build collaboration between universities in ASEAN. This is realized by the establishment of a forum, namely the Asian University Network (AUN) The result is the establishment of collaboration between several other universities in the ASEAN region, even with other countries on the European continent. By improving the quality of higher education, it is hoped that it can strengthen the competitiveness of higher education, especially in the face of the ASEAN Economic Community (Gojali et al., 2024; Haqqi et al., 2025; Madkan et al., 2025). International-class programs at the State Islamic University of Malang and the Sultan Shariff Ali Islamic University Brunei Darussalam have collaborated with universities in Asia.

The accreditation strategy is also an important focus in supporting the international reputation of the institution, in addition to focusing on quality evaluation and audits to support the development and improvement of the sustainability of the internationalization program. State Islamic University Maulana Malik Ibrahim Malang targets international accreditation schemes such as ASEAN University Network–Quality Assurance (AUN-QA) and Foundation for International Business Administration Accreditation (FIBAA). Evaluation of international activities is carried out systematically through the international affairs office, including documentation of mobility programs, research cooperation, and joint publications. Sultan Sharif Ali University uses the principles of the Islamic Quality Assurance Framework (IQAF) in conducting evaluations of international cooperation, with reporting on the results of activities as part of strengthening institutional quality (Aguiar et al., 2023; Vögtle & Windzio, 2024).

In addition, according to Rachman, et al., research states that strategic internationalization efforts in universities are necessary to increase their academic exchanges and partnerships, to improve global rankings and attract international students. Institutions need to address gender disparities in their international student populations by implementing targeted recruitment strategies (Rachman et al., 2024). In addition, the results of the research found by Sutrisno show that internationalization in higher education involves mobility, including facilitating the movement of students, faculty, and researchers across borders to encourage student exchange and knowledge transfer, as well as international academic collaboration (Sutrisno, 2019). In addition, the internationalization of higher education towards a word class university integrates a global dimension into the university's vision, curriculum, and activities, by leveraging educational technology to play a critical role in enhancing accessibility, personalized learning, and international collaboration through online platforms and distance learning. Therefore, this research makes a new contribution that in the internationalization of higher education can be carried out with various aspects from curriculum design, the application of international learning, the use of technology such as at the State Islamic University of Maulana Malik Ibrahim Malang which utilizes LMS in the form of E-Learning with an educational model integrating science and Islamic, and at Sultan Syarif Ali University using OER by integrating the Islamic values education model on local culture. As well as conducting international accreditation and being able to produce graduates who can be globally competitive.

Overall, the results of this study confirm that the internationalization of Islamic higher education that is carried out strategically, technology-based, and in line with Islamic values is able to improve the quality of institutions, expand global networks, and produce graduates who excel in academic, technological, and character competencies. The internationalization of Islamic higher education in Indonesia and Brunei Darussalam is carried out to support the formation of intellectual communities and prepare students to enter the global market based on multiculturalism. This transformation has been carried out and initiated in various programs. Universities that successfully organize a wide range of internationalization programs are supported by leaders who are committed to change, development, and achieving internationalization targets in a sustainable manner, as well as institutions that are supported by adequate staff resources and budgets. Internationalization is a strategy for Islamic universities to be on par with other universities in the world.

CONCLUSION

This study confirms that the internationalization of Islamic higher education carried out strategically and technology-based has a significant influence in improving the quality of institutions, expanding global academic networks, and preparing competitive graduates. This strategy not only includes the mobility of students and lecturers, but also the integration of the global dimension into the curriculum, the use of educational technology in the form of a Learning Management System (LMS) or E-learning which is used at the State Islamic University of Maulana Malik Ibrahim Malang Indonesia, and Open Educational Resources (OER) which is used at Sultan Syarif Ali University Brunnei Darussalam, as well as the application of an educational model that combines science, local culture, and Islamic values.

This research provides a new contribution for universities to initiate the use of educational technology as an internationalization strategy, in addition to this research strengthens previous findings that emphasize the importance of the integration of educational technology, global-based curriculum design, and international accreditation strategies as key factors in realizing the vision of a world class university. As well as the educational model used in both Indonesia and Brunei Darussalam that combines the values of knowledge, local culture, and Islamic values can be a reference for the development of internationalization in higher education. The study has limitations in scope that includes only two institutions and a limited number of samples. Therefore, further research can be conducted with different variables regarding the internationalization strategy of Islamic universities.

ACKNOWLEDGMENT

REFERENCES

Aguiar, J., de Santis, L., & Sin, C. (2023). International Student Mobility in Psychology: An Analysis of Brazilian Students in Portuguese Higher Education. *Trends in Psychology*, *31*(3), 582–600. https://doi.org/10.1007/s43076-023-00270-2

Amutuhaire, T. (2024). Regionalization and Higher Education Student Mobility in East Africa: Examination of Opportunities and Challenges from the Ugandan Context. *Journal of International Students*, *14*(1), 1–20. https://doi.org/10.32674/jis.v14i4.5976

Angreani, L. S., & Vijaya, A. (2017). Designing an effective collaboration using information technology towards world class university. *Procedia Computer Science*, *124*, 577–584. https://doi.org/10.1016/j.procs.2017.12.192

Atstsaury, S., Hadiyanto, H., & Supian, S. (2024). Principal's Strategy to Improve Teachers Professional Competence. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *5*(1), 1–10. https://doi.org/10.31538/munaddhomah.v5i1.775

Aziz, M., Napitupulu, D. S., & Parapat, F. A. (2025). The Influence of Teacher Communication Patterns in Aqidah Akhlak Education on Students' Academic Achievement. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(1), 71–86. https://doi.org/10.54069/attadrib.v8i1.840

Beaudonnet, L., & Dupuy, C. (2023). ROUNDTABLE: Internationalization: Meanings and practices of French-speaking political scientists. *French Politics*, *21*(2), 131–133. https://doi.org/10.1057/s41253-023-00210-7

Bowman, N. A., & Bastedo, M. N. (2013). Anchoring effects in world university rankings: Exploring biases in reputation scores. In *Higher Education in the Global Age* (pp. 271–287). Routledge. https://doi.org/DOI%252010.1007/s10734-010-9339-1

Breznik, K., Restaino, M., Vitale, M. P., & Ragozini, G. (2023). Analyzing countries' performances within the international student mobility program over time. *Annals of Operations Research*, 1–19. https://doi.org/10.1007/s10479-023-05436-w

Brooks, R., Courtois, A., Faas, D., Jayadeva, S., & Beech, S. (2024). International student mobility within Europe: Responding to contemporary challenges. *Higher Education*, 1–10. https://doi.org/10.1007/s10734-024-01222-0

Bulut-Sahin, B., Emil, S., Okur, S., & Seggie, F. N. (2023). Strategic management of internationalization in higher education institutions: The lens of international office professionals. *Tertiary Education and Management*, 1–17. https://doi.org/10.1007/s11233-023-09121-2

Chang, D.-F. (2015). Implementing internationalization policy in higher education explained by regulatory control in neoliberal times. *Asia Pacific Education Review*, *16*, 603–612. https://doi.org/10.1007/s12564-015-9407-4

Chao, R. Y. (2023). Intra-ASEAN student mobility: Overview, challenges and opportunities. *Journal of Applied Research in Higher Education*, *15*(5), 1736–1751. https://doi.org/10.1108/JARHE-07-2019-0178

Davids, T., van Houte, M., & Jill Alpes, M. (2025). Mixing creative and qualitative methods: An appreciative inquiry into responsible knowledge production for engaged scholars. *Journal of Ethnic and Migration Studies*, *51*(12), 3153–3169. https://doi.org/10.1080/1369183X.2025.2487747

Fitriati, F., Rosli, R., Iksan, Z., & Hidayat, A. (2024). Exploring challenges in preparing prospective teachers for teaching 4C skills in mathematics classroom: A school-university partnership perspectives. *Cogent Education*, *11*(1), 2286812. https://doi.org/10.1080/2331186X.2023.2286812

Gojali, I., Hidayah, F., Aniati, A., & Baharun, H. (2024). Mindfulness for Teachers: Strategies to Manage Stress and Improve Learning Quality in Madrasah. *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman*, *13*(2), 190–203. https://doi.org/10.54437/urwatulwutsqo.v13i2.1717

Hadisi, L., & others. (2025). Facing the Challenges of Globalization: Transforming Madrasah Education from Bilingual to International Classrooms. *Nazhruna: Jurnal Pendidikan Islam*, *8*(1), 17–30. https://doi.org/10.31538/nzh.v8i1.125

Hammarberg, K., Kirkman, M., & Lacey, S. De. (2016). *Qualitative research methods: When to use them and how to judge them. 31*(3), 498–501. https://doi.org/10.1093/humrep/dev334

Haqqi, I. S. T. A., Darim, A., & Yaqin, A. (2025). Strategic Management of Madrasah Heads in Improving the Quality of Graduates at Madrasah Aliyah. *Journal of Education and Learning Innovation*, *2*(1), 27–39. https://doi.org/10.59373/jelin.v2i1.78

Hasanudin, K., Srinio, F., & Warti'ah. (2024). Unlocking Success: Innovative Education Marketing Strategies for Elementary School Enrollment Growth. *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan*, *3*(1), 41–53. https://doi.org/10.59373/kharisma.v3i1.45

Hassan, Z., Silong, A. D., Ismail, I. A., & Asmiran, S. (2011). Developing new generation of educational leaders for world class university. *Procedia - Social and Behavioral Sciences*, *15*, 812–817. https://doi.org/10.1016/j.sbspro.2011.03.190

Hegazy, M., Hegazy, K., & Basuony, M. (2025). Global Professional Service Networks and their Members: Global Interactions and Cooperation or Lone Wolves for Autonomy? *The International Journal of Accounting*, 2550001. https://doi.org/10.1142/S1094406025500015

Horie, M. (2002). The internationalization of higher education in Japan in the 1990s: A reconsideration. *Higher Education*, *43*(1), 65–84. https://doi.org/10.1023/A:1012920215615

Hwami, M., Yeshanova, S., Amanzhol, M., Okafor, C. E., & Tursynbayeva, M. (2024). Internationalization of higher education in Central Asia: A systematic review. *Central Asian Survey*, *43*(3), 400–419. https://doi.org/10.1080/02634937.2024.2317830

Iqbal, Tahir, Ahmad, Shabir, Aftab, Faisal, & Mahmood, Chaudhary Kashif. (2025). Enhancing Higher Education Institutions' Performance: The Mediating Role of Academic Accreditation in Quality Management Initiatives in UAE. *SAGE Open*, *15*(3), 21582440251358980. https://doi.org/10.1177/21582440251358980

Khoiruddin, M. A., & Takhmid. (2024). Learning Innovation based on seTARA daring in the Community Learning Activity Center. *At-Tadzkir: Islamic Education Journal*, *3*(1), 59–69. https://doi.org/10.59373/attadzkir.v3i1.61

Kim, J., Lee, H., & Cho, Y. H. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. In *Education and Information Technologies* (Vol. 27, Issue 5). Springer US. https://doi.org/10.1007/s10639-021-10831-6

Knight, J., & De Wit, H. (2018). Internationalization of higher education: Past and future. *International Higher Education*, *95*, 2–4. https://doi.org/10.6017/ihe.2018.95.10715

Kousar, S., Ahmed, F., Afzal, M., & Segovia, J. E. T. (2023). Is government spending in the education and health sector necessary for human capital development? *Humanities and Social Sciences Communications*, *10*(1), 62. https://doi.org/10.1057/s41599-023-01514-3

Lee, J., Liu, K., & Wu, Y. (2020). Does the Asian catch-up model of world-class universities work? Revisiting the zero-sum game of global university rankings and government policies. *Educational Research for Policy and Practice*, *19*, 319–343. https://doi.org/10.1007/s10671-020-09261-x

Li, J., Xue, E., & Guo, S. (2025). The effects of PISA on global basic education reform: A systematic literature review. *Humanities and Social Sciences Communications*, *12*(1), 106. https://doi.org/10.1057/s41599-025-04403-z

Ma, W., & Yue, Y. (2015). Internationalization for quality in Chinese research universities: Student perspectives. *Higher Education*, *70*, 217–234. https://doi.org/10.1007/s10734-015-9899-1

Madkan, M., Mumtahana, L., & Ardianto, A. (2025). Implementation of Democratic Values in Islamic Education Learning: Perspectives and Approaches to Improve the Quality of Education. *Adiluhung: Journal of Islamic Values and Civilization*, *1*(1), 1–15. https://doi.org/10.59373/adiluhung.v2i1.107

Marlia, M. A., Fahmy, R., Lukito, H., & Games, D. (2025). An Exploratory Study on Effective Leadership and Change Management in the Transformation of Indonesian Public Universities Towards World-Class University Status. In *Sustainability* (Vol. 17, Issue 3). https://doi.org/10.3390/su17031300

Mayger, L., & Provinzano, K. (2021). Leadership for Family and Community Engagement: A Qualitative Policy Analysis of State Principal Evaluation Processes. *Educational Administration Quarterly*, *58*(1), 141–177. https://doi.org/10.1177/0013161X211052501

Muhammad, N., & Baihaqy, M. H. (2021). *MIB and Islamic Education in Brunei Darussalam: An Overview BT - Globalisation, Education, and Reform in Brunei Darussalam* (L. H. Phan, A. Kumpoh, K. Wood, R. Jawawi, & H. Said, Eds.; pp. 85–103). Springer International Publishing. https://doi.org/10.1007/978-3-030-77119-5_5

Murharyana, M., Ayyubi, I. I. A., Rohmatulloh, R., & Ikromi, S. N. (2024). The Effects of Islamic Religious Education Learning on Students' Motivation. *At-Tadzkir: Islamic Education Journal*, *3*(1), 1–14. https://doi.org/10.59373/attadzkir.v3i1.44

Muthohar, A., Raharjo, Thoha, A. M., & Nasikhin. (2025). Academic and Family Balance: A Comparative Study of Married Postgraduate Students in Islamic Higher Education in

Indonesia and Brunei Darussalam. *Nazhruna: Jurnal Pendidikan Islam*, *8*(1), 31–51. https://doi.org/10.31538/nzh.v8i1.14

Mutton, T., & Burn, K. (2024). Does initial teacher education (in England) have a future? *Journal of Education for Teaching*, *50*(2), 214–232. https://doi.org/10.1080/02607476.2024.2306829

Patton, M. Q. (2014). *Qualitative research \& evaluation methods: Integrating theory and practice*. Sage publications.

Pavel, Sorokin, & Isak, Froumin. (2021). 'Utility' of education and the role of transformative agency: Policy challenges and agendas. *Policy Futures in Education*, *20*(2), 201–214. https://doi.org/10.1177/14782103211032080

Qamariah, H., & Hercz, M. (2025). How EFL Instructors Improve Their Professionalism: The Voice from Indonesian Higher Education Institutions. *Jurnal Ilmiah Peuradeun*, *13*(1), 409–436. https://doi.org/10.26811/peuradeun.v13i1.1507

Rachman, A. A., Heryadi, R. D., Rachman, J. B., & Yani, Y. M. (2024). Challenges and opportunities in higher education diplomacy of World Class Universities in Indonesia: Analysing the network environment of public diplomacy. *Cogent Social Sciences*, *10*(1), 2384537. https://doi.org/10.1080/23311886.2024.2384537

Rahman, S. K. A., Mahadi, M. A., & Jaidi, N. (2023). The Role of Brunei's Philosophy in The Education System to Face the Challenges of Globalization. *International Journal of Advanced Research in Education and Society*, *5*(4), 335–350. https://doi.org/10.55057/ijares.2023.5.4.29

Rekan, A. A., Howell, H. R., Salleh, M. N. M., Rosin, N., Za, T., Ma`arif, M. A., & Adnan, M. A. M. (2025). Arabic Language Curriculum as a Foundation for Strengthening Religious Education in Public Higher Education. *Jurnal Pendidikan Agama Islam*, *22*(1), 97–121. https://doi.org/10.14421/jpai.v22i1.11340

Rensburg, I., Motala, S., & David, S. A. (2015). Internationalization of higher education: A South African perspective. *Frontiers of Education in China*, *10*(1), 91–109. https://doi.org/10.1007/BF03397054

Rofiq, M. H., Shah, A. A., Alai, A., & Istiqomah, I. (2025). Enhancing Learning Motivation in Islamic Religious Education: The Role of Sahabat Anak Muslim Comics among Elementary School Students. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(1), 255–268. https://doi.org/10.54069/attadrib.v8i1.899

Schwarz, S., & Westerheijden, D. F. (2004). *Accreditation in the Framework of Evaluation Activities: A Comparative Study in the European Higher Education Area BT - Accreditation and Evaluation in the European Higher Education Area* (S. Schwarz & D. F. Westerheijden, Eds.; pp. 1–41). Springer Netherlands. https://doi.org/10.1007/978-1-4020-2797-0_1

Seeber, M., Cattaneo, M., Huisman, J., & Paleari, S. (2016). Why do Higher Education Institutions internationalize? An investigation of the multilevel determinants of internationalization rationales. *Higher Education*, *72*, 685–702. https://doi.org/10.1007/s10734-015-9971-x

Shahrill, M., & Keasberry, C. (2024). *Higher Education in Brunei Darussalam BT - International Handbook on Education in Southeast Asia* (L. P. Symaco & M. Hayden, Eds.; pp. 91–117). Springer Nature Singapore. https://doi.org/10.1007/978-981-16-8136-3_48-1

Shavkidinova, D., Suyunova, F., & Kholdarova, J. (2023). Education is an important factor in human and country development. *Current Research Journal of Pedagogics*, *4*(01), 27–34. https://doi.org/10.37547/pedagogics-crjp-04-01-04

Shields, R., & Lu, T. (2023). Uncertain futures: Climate change and international student mobility in Europe. *Higher Education*, 1–18. https://doi.org/10.1007/s10734-023-01026-8

Shofiyyah, N. A., Komarudin, T. S., & Hasan, M. S. (2023). Innovations in Islamic Education Management within the University Context: Addressing Challenges and Exploring Future Prospects. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, *8*(2), 193–209. https://doi.org/10.31538/ndh.v8i2.3625

Sofaer, S. (2002). *Qualitative research methods. 14*(4), 329–336.

Sok, S., & Bunry, R. (2021). Internationalization of higher education in Cambodia: Toward an agenda for higher education development. *International Journal of Comparative Education and Development*, *23*(3), 193–211. https://doi.org/10.1108/IJCED-08-2020-0049

Susilawati, S., Supriyatno, T., Yasin, A. F., Chakim, A., & Putri, C. A. (2025). The Effect of TPACK-Based Contextual Teaching and Learning Model on Student Learning Outcomes. *Educational Process International Journal*, *16*, 1–18. https://doi.org/10.26858/est.v7i3.24675

Susilawati, S., Yaqin, M. Z. N., Wahidmurni, W., & Putri, C. A. (2023). Assessment of Needs for Developing Curriculum Study Program for Masters of Education in Madrasah Ibtidaiyah Teachers Towards Excellent Accreditation. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, *8*(2), 302–314. https://doi.org/10.31538/ndh.v8i2.3959

Sutrisno, A. (2019). Internationalization of Indonesian Higher Education: Recent Initiatives and their Problems. *International Higher Education*, 12. https://doi.org/10.6017/ihe.2019.97.10941

Suwendi, S., Mesraini, M., Azka, F. L., & Gama, C. B. (2024). Implementation of Knowledge Integration in Islamic Higher Education. *Jurnal Pendidikan Islam*, *10*(1), 41–52. https://doi.org/10.15575/jpi.v10i1.35385

Suyantiningsih, T., Garad, A., Sophian, M., & Wibowo, M. A. (2023). Comparison between universities in Indonesia and Malaysia: World-class college ranking perspectives. *Journal of Education and Learning (EduLearn)*, *17*(2), 249–261. https://doi.org/10.11591/edulearn.v17i2.20633

Tepelena, I. (2024). The Process of Internationalization of Universities and its Impact on Student's Decision Making. *Interdisciplinary Journal of Research and Development*, *11*(1 S1), 88. https://doi.org/10.56345/ijrdv11n1s114

Thessin, R. A., Tekleselassie, A. A., Trimmer, L. B., Shepard, S. D., & Clayton, J. K. (2024). Leveraging a Candidate Assessment System to Develop an Equity-Centered School Leadership Pipeline Through a University–District Partnership. In *Education Sciences* (Vol. 14, Issue 12). https://doi.org/10.3390/educsci14121408

Tucker, R. C., Liyanage, C., Robinson, S. J., Montebon, D. R., Gotangco Gonzales, C. K., Olpoc, J. C., Patacsil, L. B., Tantanee, S., Buranajarukorn, P., Apichayaku, O. S., Weerasinghe, R. N., & Dissanayake, R. (2025). Understanding university enterprise collaboration for disaster resilience in South-East Asia. *International Journal of Disaster Resilience in the Built Environment*, *16*(1), 104–128. https://doi.org/10.1108/IJDRBE-02-2023-0010

Uslu, B. (2020). A path for ranking success: What does the expanded indicator-set of international university rankings suggest? *Higher Education*, *80*(5), 949–972. https://doi.org/10.1007/s10734-020-00527-0

Vögtle, E. M., & Windzio, M. (2024). Does academic freedom matter for global student mobility? Results from longitudinal network data 2009—2017. *Higher Education*, *87*(2), 433–452. https://doi.org/10.1007/s10734-023-01015-x

Woo, E. (2023). What is the problem represented to be in China's world-class university policy? A poststructural analysis. *Journal of Education Policy*, *38*(4), 644–664. https://doi.org/10.1080/02680939.2022.2045038

Xu, Z. (2023). Whiteness as world-class education?: Internationalization as depicted by Western international branch campuses in China. *Higher Education*, *85*(4), 919–936. https://doi.org/10.1007/s10734-022-00872-2

Zamiri, M., & Esmaeili, A. (2024). Strategies, Methods, and Supports for Developing Skills within Learning Communities: A Systematic Review of the Literature. In *Administrative Sciences* (Vol. 14, Issue 9). https://doi.org/10.3390/admsci14090231

Zhu, T., & Gu, M. (2024). The application and implications of science and technology innovation in the management of education for Chinese students studying abroad in China in the epidemic era. *Plos One*, *19*(8), e0306785. https://doi.org/10.1371/journal.pone.0306785

Zhuang, T., Oh, M., & Kimura, K. (2025). Modernizing higher education with industrial forces in Asia: A comparative study of discourse of university-industry collaboration in China, Japan and Singapore. *Asia Pacific Education Review.* https://doi.org/10.1007/s12564-024-10033-y