



Higher Education Development Planning: Collaborative Strategies for Key Performance Indicator (KPI) Success

Andhi Wijayanto^{1✉}, ²Sri Wartini, ³Erisa Aprilia Wicaksari

^{1,2,3}Faculty of Economics and Business, Universitas Negeri Semarang, Semarang

Permalink/DOI: <https://doi.org/10.15294/jejak.v17i2.21533>

Received: May 2024 ; Accepted: July 2024 ; Published: September 2024

Abstract

This study aims to identify strategies for improving the achievement of Key Performance Indicator (KPI) 2 related to the Merdeka Belajar Kampus Merdeka (MBKM) program in the Management Study Program at Universitas Negeri Semarang (UNNES). KPI-2 focuses on increasing student participation in off-campus activities, such as internships, student exchange programs, and humanitarian projects. The study adopts a qualitative approach, utilizing SWOT analysis and QSPM to examine both internal and external factors affecting the implementation of the MBKM program. The findings reveal that while the Management Study Program has a relevant curriculum and is supported by ministerial policies, challenges such as limited types of MBKM activities and competition with students from other universities remain obstacles. Based on the analysis, the integration of the MBKM program with faculty research project assistance activities is proposed as a strategy to enhance student participation. The implementation of this strategy is expected to improve the achievement of KPI-2 for the Management Program at UNNES and serve as a reference for other study programs in executing MBKM.

Key words : Key Performance Indicator, SWOT Analysis, QSPM

How to Cite: Wijayanto, A., Wartini, S., & Wicaksari, E, A (2024). Higher Education Development planning: Collaborative Strategies for Key Performance Indicator (KPI) Success. *JEJAK: Jurnal Ekonomi dan Kebijakan*, 17(2). doi: <https://doi.org/10.15294/jejak.v17i2.21533>

✉ Corresponding author : Andhi Wijayanto
Address: Universitas Negeri Semarang, Semarang
E-mail: erisa@mail.unnes.ac.id

INTRODUCTION

The Minister of Education and Culture, through the Minister of Education and Culture Decree Number 3/M/2021 (Ministry of Education and Culture, 2021), established the Key Performance Indicators (KPI) as new performance indicators for higher education institutions. This decision represents an adaptive value and has concrete implications. This policy also serves as a measurement tool to accelerate the realization of a free and independent learning campus. The development of higher education is mandated by the Minister of Education and Culture of the Republic of Indonesia Regulation Number 22 of 2020 (Strategic Plan of the Ministry of Education and Culture for the 2020-2024 period, 2020) regarding the Strategic Plan of the Ministry of Education and Culture for the 2020-2024 period.

The higher education strategic plan outlines three key goals: improving learning quality and relevance, enhancing lecturer competence, and achieving effective governance within the Directorate General of Higher Education.

Key Performance Indicators (KPI) is one type of performance contract made between state universities (PTN) and the Ministry Education, Culture, Sports, Science, and Technology are aimed at realizing high-quality higher education. The latest Key Performance Indicator (KPI), established through the Minister of Education and Culture Decree Number 3/M/2021, has three main indicators: First, the quality of graduates is measured by their ability to secure good jobs and by students gaining.

Second, the quality of instructors and trainers is assessed based on the fact that they work outside the university, teach practitioners on campus, and their work is utilized by society and internationally evaluated. Third, the sub-indicator of curriculum quality includes the presence of study programs that collaborate with world-class partners, collaborative and participatory courses, and study programs with international standards. The practical implementation of MBKM faces many challenges. Fuadi & Aswita (2021) identified five challenges in the implementation of MBKM: curriculum adaptation processes, limited partners, limited collaboration between universities, the availability of higher education budgets for MBKM programs, and the quality and productivity of lecturers and students. One of the challenges in the implementation of MBKM is the low participation of students in the MBKM program, which impacts the low achievement of the Key Performance Indicators (KPI) in the MBKM program, particularly KPI-2 in the Management study program.

Based on the MBKM recap data for 2023 presented in Figure 1, the average number of Management program students participating in the MBKM internship is less than 17% of the total active students in the Management program. This indicates the need to maximize the MBKM program implemented in the Management study program. Several factors that contribute to the difficulty in optimally implementing MBKM include: insufficient preparation of the higher education system, challenges in changing courses, the complexity of cooperation processes, lack of student support, and the limited number of students participating in MBKM (Puspitasari & Nugroho, 2021).

NO	Study Programs	KPI-1	KPI-2	KPI-3	KPI-4	KPI-5	KPI-6	KPI-7	KPI-8
1	Bachelor of Economi Education (710140)	40,91%	16,53%	60,00%	95,00%	1,280,00%	100,00%	97,44%	100,00%
2	Bachelor of Accounting (725040)	66,14%	22,36%	68,00%	100,00%	1,560,00%	100,00%	97,17%	100,00%
3	Bachelor of Islamic Economics and Finance (725140)	00,00%	0,00%	100,00%	100,00%	1,000,00%	100,00%	100,00%	0,00%
4	Bachelor of Management (735040)	46,09%	16,99%	73,33%	96,67%	940,00%	100,00%	93,81%	100,00%
5	Bachelor of Development Economics (745040)	59,84%	17,59%	68,42%	94,74%	1,642,11%	100,00%	96,37%	100,00%

Figure 1. Monitoring the Achievement of Key Performance Indicator (KPI) in the Study Program of FEB UNNES

Many efforts have been made to carry out activities related to educational renewal or innovation in higher education, one of which is through a collaborative partnership model between universities, industry, and the government. The strategy of cooperation or collaboration is an approach taken by one organization with another to build or improve its condition in order to achieve specific benefits and goals for both parties (Diana & Hakim, 2020). According to Adisasmita (2010), collaboration is a concept of relations between organizations, intergovernmental relations, strategic alliances, and multi-organizational systems. Collaboration involves cooperation between two or more stakeholders to manage shared resources, which would be difficult to achieve individually. Furthermore, Adisasmita (2010) explains that collaboration is associated with a clear cooperation arrangement, trust balanced with commitment, as well as institutional structure and capacity. University-industry collaboration is carried out to achieve the goal of knowledge exchange from universities to industry. Some mechanisms for knowledge exchange from universities to industry include (Diana & Hakim, 2020) joint classroom collaboration

between universities and industr, academic publications, and technical consulting services.

Reference materials on strategies for improving the achievement of Key Performance Indicators (KPI) related to the MBKM program are not yet widely available. Research on strategies for enhancing the achievement of Key Performance Indicator (KPI) should continue to provide input for study programs implementing MBKM and contribute to improving the university's KPI performance. The improvement of KPI-2 achievement at the university is closely related to the support of the study programs. Therefore, study programs should implement steps to increase student participation in off-campus activities. Based on the research conducted by Purnaningsih, T., Putri, R.K., Mashabhi, S., and Evayin (2023), an alternative strategy to improve KPI-2 achievement was identified, which is the integration of the MBKM program with faculty research project assistance activities. This strategy is expected to be implemented and eventually serve as a reference for study programs at Universitas Palangka Raya and other universities in the implementation of MBKM. Based on these research findings, the

most appropriate strategy will be sought to improve the KPI-2 achievement of the Management Study Program at UNNES. Higher education institutions are expected to meet performance indicators that reflect their ability to prepare graduates for the job market and industry. However, achieving KPI-2, which measures student involvement in off-campus activities, remains a challenge for many universities, including Universitas Negeri Semarang (UNNES). The low participation rate of students in the MBKM internship program highlights the need for strategies that enhance student engagement and collaboration with external partners. Addressing these challenges requires structured efforts that include policy adjustments, strengthening university-industry collaborations, and providing better incentives for student participation. Without a clear and effective strategy, universities risk falling behind in national and international rankings, affecting both institutional reputation and graduate employability.

Furthermore, universities play a crucial role in ensuring that students acquire practical experience and skills relevant to industry needs. The limited participation of students in off-campus learning programs can lead to skill gaps that hinder graduates' competitiveness in the labor market. This research is essential to formulate collaborative strategies between universities, industry, and government to increase student involvement in off-campus learning experiences. Effective strategies can contribute to the development of a sustainable model for university-industry collaboration, addressing existing barriers such as bureaucratic complexities, lack of student incentives, and limited cooperation opportunities with external institutions. Another important aspect of this research is its potential contribution to policy formulation. Identifying best practices in

collaborative strategies can provide valuable insights for policymakers in designing higher education frameworks that align with global education standards. The findings of this study will help institutions formulate concrete action plans to enhance student participation in off-campus programs, ensuring that higher education remains relevant and responsive to industry demands. Ultimately, this research will support the achievement of national education goals and contribute to the broader discourse on educational innovation and workforce readiness in Indonesia.

RESEARCH METHODS

The research was conducted from June to September 2024 at the Management Study Program of Universitas Negeri Semarang. This type of research is qualitative. The respondents involved in the study numbered 30 people, consisting of faculty members of the Management Study Program, students, and staff of the Management Study Program. The respondents were selected using Purposive Sampling technique. The information for this research was collected through both primary and secondary sources. Groundwork information was obtained using semi-structured interviews, observations, and questionnaires. The interviews provided in-depth insights from faculty members, students, and staff regarding the challenges and opportunities in achieving (KPI)-2 targets, while observations were conducted to examine the implementation process of Merdeka Belajar Kampus Merdeka (MBKM) in the Management Study Program. Questionnaires were also distributed to gather quantitative data on student participation, perceptions, and engagement in off-campus learning activities. Meanwhile, secondary information was derived from

program documents such as the curriculum, tracer studies, and quality reports, which provided historical and contextual data to support the analysis of existing conditions and institutional strategies.

The analysis in this research was conducted in three stages. The first stage involved identifying internal and external factors to determine the strengths, weaknesses, opportunities, and threats that influence the achievement of (KPI)-2 in the Management Study Program. The second stage applied the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, a widely used strategic planning tool for evaluating organizational positioning (Gürel & Tat, 2017). SWOT has been effectively utilized in various fields such as tourism, agriculture, healthcare, and environmental management (Navarrete et al., 2022; Kişi, 2019; Ajmera, 2017; E.Y. et al., 2022), and in this study, it was used to assess the strategic position of the Management Study Program concerning its KPI-2 performance. The third stage employed the Quantitative Strategic Planning Matrix (QSPM) method to prioritize alternative strategies based on their relative importance and feasibility, providing a structured approach to decision-making in strategic planning (Metzger et al., 2012; Adamu & Shakantu, 2016).

To enhance the effectiveness of SWOT analysis, this study incorporates the AWOT (AHP-SWOT) analysis, a hybrid method that combines SWOT analysis with the Analytic Hierarchy Process (AHP). AWOT analysis has been applied in various contexts, such as community-based mangrove management, palm oil plantation rejuvenation strategies, and strategies for controlling rice field conversion (Ghazali et al., 2014; Panggabean

et al., 2023; Manalu et al., 2022). This approach enables a more comprehensive evaluation of internal and external factors, providing a structured framework for strategy formulation and decision-making. Studies have shown that AWOT analysis provides a strong foundation for strategic decision-making by combining both qualitative and quantitative aspects (Ghazali et al., 2014; Panggabean et al., 2023; Manalu et al., 2022). In the context of business development, AWOT analysis has been used to identify strengths, weaknesses, opportunities, and threats faced by companies, enabling the formulation of more focused and effective strategies (Shadiq, 2023; Hadian & Syamsuri, 2022; Saudin et al., 2019). Furthermore, the use of AWOT analysis in the agriculture, tourism, and natural resource management sectors has significantly contributed to determining priorities for sustainable development strategies (Manalu et al., 2022; Maharani, 2019; Saudin et al., 2019). By integrating AHP and SWOT, researchers can provide stronger and more measurable recommendations for the development of various sectors. In this study, the integration of AHP and SWOT in the context of higher education management will allow for the identification of strategic initiatives to enhance student participation in MBKM and ultimately improve KPI-2 performance at Universitas Negeri Semarang.

RESULTS AND DISCUSSION

KPI 2: Students Gaining Experience Outside of Campus. Indicator: The percentage of students participating in off-campus activities such as internships, student exchanges, humanitarian projects, or entrepreneurship programs.

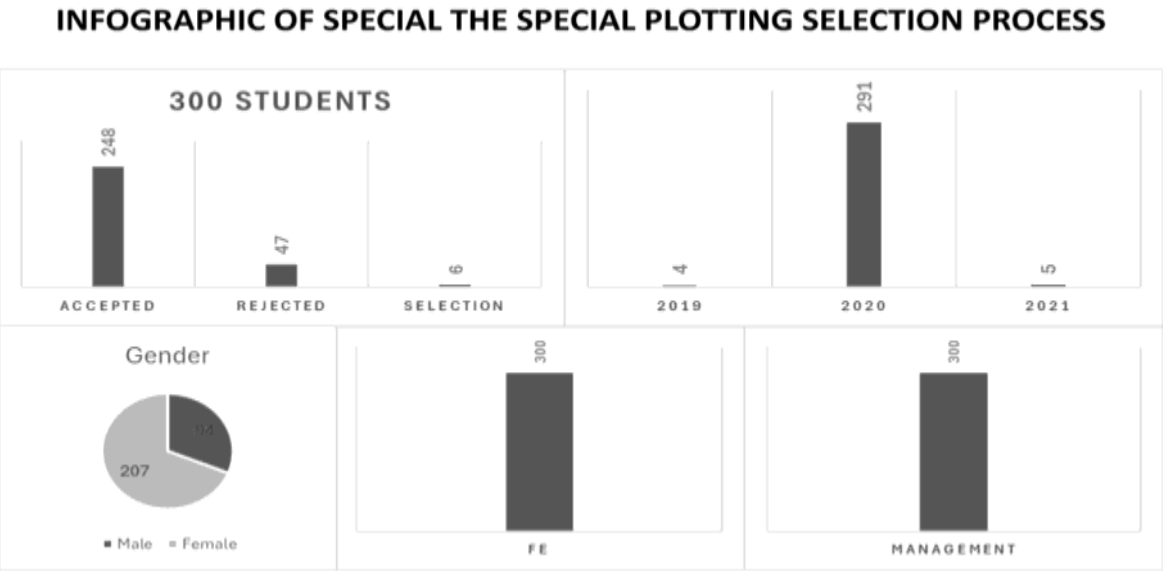
Merdeka Belajar Kampus Merdeka (MBKM) allows students to engage in cross-curriculum learning. This program also provides students with the option to take courses either at UNNES or at other universities. he MBKM program aligns with the goal of preparing students for the workforce by enhancing their skills through real-world experiences (Ministry of Education and Culture, 2021).

The Merdeka Belajar Kampus Merdeka (MBKM) learning framework allows students to take courses across different academic environments. These include studying in a different study program within Universitas Negeri Semarang (UNNES), enrolling in the same study program at another university, pursuing courses in a different study program outside UNNES, or participating in learning activities at non-university institutions.

The scope of Merdeka Belajar Kampus Merdeka (MBKM) encompasses a wide range

of experiential learning activities designed to strengthen the relevance of higher education to real-world professional and social contexts. These activities include internships or work practices, village development through the Thematic Community Service Program (KKN), student exchanges, humanitarian projects, research, entrepreneurship, independent studies or projects, and teaching assistance in educational institutions. Through these eight forms of learning, students are encouraged to apply theoretical knowledge to practical settings, develop interdisciplinary collaboration skills, and foster social awareness and leadership.

The Management Study Program at Universitas Negeri Semarang (UNNES) actively participates in MBKM to enhance student learning experiences. The number of students from the Management Study Program who participated in MBKM activities in 2024 is illustrated in Figure 2.



Source: MBKM Data Apps UNNES (2024)

Figure 2. Students Participating in the MBKM Program

From Figure 2, it can be seen that the number of students participating in off-campus MBKM activities is 300 students.

These 300 students are distributed across various institutions for internships under the UNNES GIAT Batch 6 program.

Table 1. Number of Management Study Program Students Participating in MBKM in 2024

No.	MBKM Activity	Number of Participants
1.	UNNES GIAT	295
2.	KEDAIREKA	5
3.	Lainnya	0
	TOTAL	300

Source: MBKM Data Apps UNNES (2024)

From Table 1, 295 students participated in UNNES GIAT activities, and 5 students were involved in KEDAIREKA programs. The relatively low participation in KEDAIREKA suggests the need for strategic initiatives to increase student engagement in various MBKM activities beyond the dominant UNNES GIAT program.

Despite notable progress in student participation, several challenges continue to hinder the optimal implementation of (MBKM) program in achieving Key Performance Indicator (KPI)-2 targets. One of the main obstacles is the limited number of institutional partners that can accommodate internship and student exchange programs, which restricts the diversity of off-campus learning opportunities available to students (Fuadi & Aswita, 2021). In addition, many students remain insufficiently aware of the potential benefits of MBKM, resulting in low motivation to participate in activities beyond the commonly preferred UNNES GIAT scheme (Puspitasari & Nugroho, 2021). Curriculum alignment also remains a concern, as several courses have not been fully integrated with MBKM activities, creating challenges in credit transfer and academic recognition (Diana & Hakim, 2020).

Moreover, financial limitations persist, with the available budget for MBKM implementation remaining inadequate to ensure the sustainability and expansion of the program (Adamu & Shakantu, 2016). These interrelated constraints underscore the importance of comprehensive institutional efforts to broaden partnership networks, strengthen student engagement, harmonize curriculum structures, and secure sufficient funding to achieve MBKM implementation in accordance with KPI-2 objectives.

To address these challenges and improve KPI-2 achievement, the following strategies are recommended. Strengthening partnerships through collaboration with industry, government, and international universities can broaden Merdeka Belajar Kampus Merdeka (MBKM) opportunities and expose students to diverse off-campus learning environments (Ghazali et al., 2014). Enhancing student engagement through consistent socialization and mentoring programs is equally important to build awareness and encourage active participation in MBKM activities (Purnaningsih et al., 2023). Integrating MBKM into the curriculum will facilitate academic credit transfer and align experiential learning with course

outcomes, thereby expanding participation across the Management Study Program (Shadiq, 2023). Finally, securing sustainable funding through government grants, private sector collaboration, and international partnerships is essential to ensure long-term program implementation and growth (Manalu et al., 2022). Collectively, these strategies reinforce institutional capacity, strengthen student involvement, and contribute to the continuous improvement of KPI-2 performance.

This analysis aims to identify the strengths, weaknesses, opportunities, and threats (SWOT) in implementing the internship program for the Management Study Program at Universitas Negeri

Semarang (UNNES). The data was obtained through in-depth interviews with key stakeholders, including lecturers, educational staff, and students of the Management Study Program. Additionally, surveys were conducted with lecturers, students, and industry partners, as well as document studies related to collaboration. Based on the results of in-depth interviews with key stakeholders: Lecturers, Educational Staff, and Management Study Program students, as well as surveys of lecturers, students, and industry partners, and document studies and reports related to collaboration, the internal and external factors data are presented as shown in Table 2.

Table 2. Internal and External Factors of the Internship Program for the Management Study Program at UNNES

Internal Factors			
Strenghts	Weight	Rating	Score
The Management Study Program has a curriculum that is relevant to industry needs	0,20	3,0	0,6
Students have equal opportunities to participate in the <i>MBKM</i> activities they are interested in	0,10	1,0	0,1
The availability of the <i>MBKM</i> system that facilitates students in the academic administration process	0,10	2,0	0,2
The university and faculty regularly provide information on the implementation of <i>MBKM</i> activities	0,10	3,0	0,3
The presence of <i>MBKM</i> operators in each study program that facilitates obtaining detailed information related to <i>MBKM</i>	0,10	2,0	0,2
Weaknesse			
The number of lecturers and educational staff is not ideal compared to the number of active students in the Management Study Program	0,20	3,0	0,6
The limited types of <i>MBKM</i> activities that Management students can participate in.	0,10	3,0	0,3
The internship implementation time sometimes does not align with the timeline set in the <i>MBKM</i> system	0,10	2,0	0,2
Total	1,0		2,5

Strengths represent the internal factors that contribute to the effective implementation of the internship program

with in the Management Study Program at Universitas Negeri Semarang (UNNES). The program's curriculum is designed to align

closely with industry needs, ensuring that students develop knowledge and skills relevant to labor market demands and thereby enhancing their employability. Equal access to Merdeka Belajar Kampus Merdeka (MBKM) activities allows all students to pursue internship opportunities that match their academic interests and career goals. The presence of a dedicated MBKM system further facilitates the management of academic administration related to internship placements, increasing the efficiency and transparency of the process. Moreover, the proactive dissemination of information by the university and faculty ensures that students are well-informed and adequately prepared to engage in MBKM programs. Each study program also benefits from designated MBKM operators who provide technical and administrative assistance, promoting smooth coordination between students, faculty, and partner institutions. Collectively, these strengths highlight UNNES's readiness to support meaningful off-campus learning experiences that contribute to the

achievement of Key Performance Indicator (KPI)-2 objectives.

Several internal weaknesses still limit the effectiveness of the internship program in the Management Study Program at Universitas Negeri Semarang (UNNES). The imbalance between the number of lecturers and students often constrains supervision quality during internships. The range of Merdeka Belajar Kampus Merdeka (MBKM) activities offered to Management students is also relatively narrow, reducing opportunities for diverse industry exposure. Furthermore, misalignment between internship schedules and the official MBKM timeline creates administrative and logistical obstacles. Addressing these issues requires better resource allocation, flexible academic planning, and stronger coordination to support the achievement of Key Performance Indicator (KPI)-2.

The total score for internal factors is 2.5, which indicates that the Management Study Program has strong internal potential but still faces challenges that need to be addressed for optimal program execution.

Opportunities

Support from the ministry's policies and stakeholders for the <i>MBKM</i> program	0,25	3,0	0,75
The number of stakeholders offering <i>MBKM</i> internships is growing	0,20	2,0	0,4
Recognition from stakeholders for alumni who have participated in the <i>MBKM</i> program	0,15	2,0	0,3

Threats

Competition with students from other universities to secure <i>MBKM</i> internship placements	0,20	3,0	0,6
High expectations from the business world that sometimes do not align with students' competencies	0,20	2,0	0,4
Total	1,0		2,45

Source: Data processed by the researcher, 2024

Opportunities are external conditions that can positively impact the implementation of the internship program. The Ministry of Education and various stakeholders actively support the Merdeka Belajar Kampus Merdeka (MBKM) program, creating a favorable environment for the development of internship opportunities. In addition, more industry partners are now opening internship placements under MBKM, expanding students' chances to gain real-world experience. Companies and industry partners also value graduates who have participated in MBKM activities, which enhances their employability and competitiveness in the job market.

Threats are external challenges that may hinder the effectiveness of the internship program. Students from various universities compete for a limited number of internship placements, making it more difficult for UNNES students to secure available positions. In addition, companies often set high expectations for interns, which may not always align with students' actual competencies, creating a gap between industry demands and student readiness. These challenges highlight the importance of strengthening collaboration and improving student preparation to meet professional standards and maintain the effectiveness of Merdeka Belajar Kampus Merdeka (MBKM) implementation.

The total score for external factors is 2.45, indicating that while there are strong external opportunities, some significant threats need to be mitigated to maximize student participation and success in the internship program.

From an economic perspective, the internship program plays a crucial role in bridging the gap between academic learning and the demands of the labor market. It contributes to enhancing human capital, as students who participate in internships gain

practical skills and professional experience that increase their productivity and market value. Well-structured internship programs also help reduce structural unemployment by aligning students' competencies with industry needs, thereby minimizing the mismatch between job seekers and job opportunities. In addition, internship activities can boost economic growth by supplying skilled labor to industries, fostering innovation, and improving national competitiveness. Strengthening collaboration between universities and businesses further promotes knowledge transfer, which supports both industrial performance and broader economic development. Moreover, research indicates that students with internship experience tend to have higher starting salaries and stronger career prospects than those without practical training. Collectively, these factors emphasize the internship program's significant contribution to labor market efficiency and sustainable economic advancement.

By addressing internal weaknesses and external threats while leveraging economic opportunities, the Management Study Program at UNNES can further enhance the impact of its internship program on students' professional success and economic contributions.

From the perspective of Development Economics, the MBKM program aligns with human capital theory, emphasizing education and skills development as drivers of economic progress. According to Todaro and Smith (2020), investments in education and training enhance the Human Development Index (HDI) by improving education quality, health, and income levels. The MBKM program contributes to HDI by fostering practical skills and employability, directly impacting the education and income components of HDI.

Future policy directions should emphasize broader access, alignment with

national goals, and quality assurance in implementing Merdeka Belajar Kampus Merdeka (MBKM). Expanding access for underrepresented groups will promote equitable skill development and strengthen the education aspect of the Human Development Index (HDI). Aligning MBKM with Indonesia's long-term development plans such as the RPJMN can enhance workforce readiness and economic productivity, supporting the HDI's income component. In addition, rigorous monitoring and evaluation are essential to ensure MBKM activities meet industry standards and contribute to improved education quality and HDI outcomes.

Future development objectives should focus on diversifying skills, promoting regional inclusion, and enhancing global competitiveness through Merdeka Belajar Kampus Merdeka (MBKM). Expanding MBKM activities into emerging areas such as digital technology and green industries will better prepare students for future job markets while supporting sustainable economic growth. The program can also be leveraged to reduce regional disparities by involving students in rural or underdeveloped areas, contributing to local economic development and improvements in the Human Development Index (HDI). Furthermore, strengthening international partnerships will increase students' exposure to global standards, fostering a generation of graduates who are both well-educated and globally competitive, thereby supporting Indonesia's HDI advancement.

By linking MBKM to HDI improvement, the program enhances education quality, equipping students with skills that increase employability and income potential. This, in turn, supports national economic development and elevates Indonesia's global HDI standing.

CONCLUSION

The internship program for the Management Study Program at UNNES presents significant benefits in preparing students for the job market. While internal strengths such as a relevant curriculum and strong administrative support provide a solid foundation, weaknesses like limited MBKM activity options and staffing challenges must be addressed. External opportunities such as government support and industry collaboration enhance the program's potential, but competition and high industry expectations pose challenges. By leveraging strengths, addressing weaknesses, and mitigating external threats, the program can optimize its role in enhancing students' employability and economic contribution.

REFERENCES

- Adamu, A. D., & Shakantu, W. M. W. (2016). Strategic maintenance management of built facilities in organisation. *International Scholarly and Scientific Research & Innovation*, 10(4), 1104–1107.
- Adisasmita, R. (2010). *Collaboration and Intergovernmental Relations: Theory and Practice*. Jakarta: Graha Ilmu.
- Ajmera, P. (2017). Evaluating healthcare strategies using SWOT-AHP analysis. *Journal of Health Management*, 19(4), 590–606.
- Diana, & Hakim, L. (2020). The role of university-industry collaboration in improving education and innovation. *Journal of Education and Innovation*, 7(3), 112–126.
- E.Y., T., et al. (2022). Application of SWOT analysis in environmental management decision-making. *Environmental Policy Journal*, 15(1), 55–72.

- Fuadi, T. M., & Aswita, D. (2021). Challenges in implementing MBKM: A case study of Indonesian universities. *Indonesian Journal of Higher Education*, 9(2), 150–170.
- Ghazali, A., et al. (2014). Strategic planning for mangrove ecosystem management using AWOT analysis. *Journal of Environmental Studies*, 22(1), 87–103.
- Gürel, E., & Tat, M. (2017). SWOT analysis: A theoretical review. *Journal of Management and Strategy*, 8(2), 23–37.
- Hadian, H., & Syamsuri, A. (2022). SWOT-AHP analysis in the business sector: A case study on Indonesian SMEs. *Indonesian Journal of Business Strategy*, 10(4), 99–120.
- Kiş, N. (2019). SWOT analysis in tourism development planning. *Tourism Management Perspectives*, 32, 100–108.
- Maharani, N. (2019). Sustainable development planning using SWOT analysis in agriculture. *Agricultural Economics Review*, 5(3), 220–234.
- Manalu, M., et al. (2022). Application of AWOT analysis in palm oil plantation strategies. *Journal of Agribusiness and Management*, 15(1), 45–60.
- Metzger, E., Pino, S. P. D., Prowitt, S., & Woodward, J. (2012). Strategic analysis framework for higher education institutions. *Higher Education Research & Development*, 31(5), 715–730.
- Ministry of Education and Culture. (2021). Ministerial Decree Number 3/M/2021 on Higher Education Key Performance Indicators. Jakarta: Ministry of Education and Culture.
- Navarrete, A., et al. (2022). SWOT-AHP hybrid method in tourism strategy development. *Journal of Tourism and Hospitality Management*, 11(3), 187–203.
- Panggabean, R., et al. (2023). Strategic analysis for controlling rice field conversion using SWOT-AHP. *Journal of Sustainable Agriculture*, 12(2), 88–105.
- Puspitasari, R., & Nugroho, R. (2021). Challenges in optimizing MBKM implementation in Indonesia. *Journal of Educational Policy and Management*, 8(1), 130–145.
- Purnaningsih, T., Putri, R. K., Mashabhi, S., & Evayin, A. (2023). Strategies for improving KPI-2 achievements through faculty research projects. *Journal of Higher Education Development*, 14(3), 210–230.
- Ragheb, M. (2021). Application of A'WOT in strategic planning. *Strategic Management Journal*, 20(1), 85–98.
- Saudin, S., et al. (2019). The role of SWOT analysis in sustainable business development. *Indonesian Business Review*, 7(4), 140–155.
- Shadiq, M. (2023). Business strategy formulation using AWOT analysis. *Business and Management Journal*, 18(2), 77–95.
- Yüksel, I., & Dağdeviren, M. (2007). Using the AHP-SWOT hybrid method in strategic planning. *Journal of Strategic Management*, 12(3), 87–110.