JIMEA | Jurnal Ilmiah MEA (Manajemen, Ekonomi, dan Akuntansi)
Vol. 9 No.2, 2025

STRATEGIC PLANNING FOR THE COMPUTER ENGINEERING PROGRAM IN THE CONTEXT OF INTERNATIONALIZATION AT XYZ UNIVERSITY

Arief Rachman[1]; Utomo Sarjono Putro[2]
Institut Teknologi Bandung, Bandung[1,2]
Email : arachmana350gmail.com[1]; utomo@sbm-itb.ac.id[2]

ABSTRACT

An internationalization initiative at XYZ University's Computer Engineering program, involving the establishment of an international class, has created a significant operational risk. A regulation mandating the transfer of 6 to 10 lecturers from the main program threatens to disrupt academic stability and teaching quality for its existing 300+ students. This research develops a strategic plan to address the lecturer transfer challenge. A mixed-method approach was employed. Internal analysis, through thematic analysis of stakeholder interviews, identified strengths such as digital readiness and industry partnerships, and weaknesses like lecturer availability issues. External analysis using PESTLE and Porter's Five Forces identified opportunities, including IoT advancements, and threats such as higher education competition. These factors informed a SWOT analysis, which led to seven TOWS-generated strategies. The Analytic Hierarchy Process (AHP), with input from eight program stakeholders, was then used to prioritize these alternatives.The AHP results showed that "Strength" was the most critical decision criterion. The strategy SO1: "Utilize industry partnerships and digital readiness to deliver IoT–integrated hybrid learning, reducing lecturer dependency," received the highest global priority (18.2%). The AHP model demonstrated good consistency (overall CR=0.03). This study concludes that implementing an IoT-integrated hybrid learning model is the most effective strategy for the Computer Engineering program to manage the lecturer transfer. The research provides an evidence-based SWOT-AHP framework for higher education institutions managing resources during internationalization, ensuring that expansion enhances rather than compromises core academic quality.

Keywords : Strategic Planning; Higher Education Internationalization; Computer Engineering; Faculty Resource Management; Analytic Hierarchy Process; SWOT Analysis; Hybrid Learning

ABSTRAK

Internasionalisasi program Teknik Komputer (TK) Universitas XYZ melalui kelas internasional menimbulkan risiko akibat rencana pemindahan 6-10 dosen dari program utama yang melayani lebih dari 300 mahasiswa. Hal ini dapat mengganggu stabilitas akademik, kualitas pengajaran, dan beban kerja dosen. Penelitian ini bertujuan mengembangkan rencana strategis untuk mengatasi dampak pemindahan dosen dengan mengidentifikasi kriteria strategis, mengembangkan alternatif, dan menentukan strategi terbaik. Pendekatan metode campuran digunakan. Analisis internal (tematik wawancara) mengidentifikasi kekuatan (dosen berkualitas, kesiapan digital, kemitraan industri) dan kelemahan (ketersediaan dosen). Analisis eksternal (PESTLE, Porter) mengidentifikasi peluang (kemajuan IoT, dukungan universitas) dan ancaman (persaingan). Sintesis SWOT menghasilkan tujuh strategi TOWS. Proses

Hierarki Analitik (AHP) dengan delapan pakar TK memprioritaskan alternatif berdasarkan kriteria SWOT. Hasil AHP menunjukkan "kekuatan" sebagai kriteria terpenting. Strategi SO1: "Memanfaatkan kemitraan industri dan kesiapan digital untuk pembelajaran hibrid terintegrasi IoT, mengurangi ketergantungan dosen" memperoleh prioritas global tertinggi (18,2%), selaras dengan kapabilitas digital dan mitra industri program. Model AHP konsisten (CR keseluruhan=0,03). Kesimpulannya, penerapan pembelajaran hibrid terintegrasi IoT didukung kemitraan industri dan infrastruktur digital adalah strategi paling efektif untuk program TK dalam mengatasi perpindahan dosen. Studi ini menawarkan kerangka SWOT-AHP berbasis bukti bagi institusi pendidikan tinggi untuk mengelola sumber daya saat internasionalisasi, memastikan ekspansi tidak mengorbankan kualitas akademik inti.

Kata Kunci : Perencanaan Strategis; Internasionalisasi Pendidikan Tinggi; Teknik Komputer; Manajemen Sumber Daya Fakultas; Proses Hierarki Analitik; Analisis SWOT; Pembelajaran Hibrid

INTRODUCTION

The internationalization of higher education has become a significant global trend, with institutions worldwide seeking to enhance their global engagement, academic prestige, and student diversity. In line with this, XYZ University has prioritized improving its international outlook, which includes the strategic internationalization of its academic programs. Because of the internationalization Computer Engineering program at XYZ University received the authority to establish an international class aimed at attracting a more diverse student body and enhancing its global standing. However, a key challenge has emerged from an institutional policy mandating the transfer of 6-10 lecturers from the main Computer Engineering program to this new international class. This transfer shown a great risk of disrupting the Computer Engineering main program, which currently operates with 300 students, potentially disrupting academic stability, teaching quality, and existing lecturer workload. This situation presents a critical strategic problem: how to pursue internationalization objectives without compromising the quality and operational effectiveness of the core academic program. This research was conducted to address this challenge by developing a robust strategic plan for the Computer Engineering program at XYZ University in the context of this internationalization effort. The primary objectives of this study were: (1) to identify and define the key criteria for formulating strategic options for the Computer Engineering program amidst lecturer reallocation; (2) to develop a set of viable alternative strategies to address the challenges posed by this

lecturer transfer; and (3) to determine the most suitable and effective strategy for the main Computer Engineering program to implement.

This research was conducted to address this challenge by developing a robust strategic plan for the Computer Engineering program at XYZ University in the context of this internationalization effort. The primary objectives of this study were: (1) to identify and define the key criteria for formulating strategic options for the Computer Engineering program amidst lecturer reallocation; (2) to develop a set of viable alternative strategies to address the challenges posed by this lecturer transfer; and (3) to determine the most suitable and effective strategy for the main Computer Engineering program to implement.

The contributions of this research are twofold. Theoretically, it offers an evidence-based strategic planning framework integrating SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis with the Analytic Hierarchy Process (AHP). This framework can be valuable for other higher education institutions facing similar resource management dilemmas during internationalization initiatives. Practically, this study provides XYZ University's Computer Engineering program with a clearly prioritized and actionable strategy to manage the impending lecturer transfer. This ensures that the expansion effort enhances rather than compromises core academic quality and operational stability.

The study employed a mixed-method approach, involving internal stakeholder analysis and external environmental scanning (PESTLE, Porter's Five Forces), synthesized into a SWOT analysis, which led to the generation of seven TOWS-based strategic alternatives. These alternatives were then prioritized using AHP with input from eight Computer Engineering program stakeholders. The key finding of this research indicates that the strategy SO1, "Utilize industry partnerships and digital readiness to deliver IoT-integrated hybrid learning, reducing lecturer dependency," received the highest global priority (18.2%) among the alternatives considered. The AHP model demonstrated good consistency with an overall Consistency Ratio (CR) of 0.03. This implies that leveraging existing strengths in digital infrastructure and established industry collaborations to implement innovative hybrid learning models presents the most effective path for the Computer Engineering program to navigate the

challenges of lecturer reallocation while successfully pursuing its internationalization goals.

LITERATURE REVIEW AND HYPHOTHESIS DEVELOPMENT

Internationalization in Higher Education

The global landscape of higher education is increasingly characterized by Internationalization, a process defined as the integration of international and intercultural dimensions into the core functions of post-secondary institutions. This drive is fueled by universities' aspirations to enhance academic prestige, broaden research collaborations, and attract a diverse student body. While the benefits are substantial, internationalization initiatives, such as the establishment of new international programs, present significant strategic challenges, particularly concerning the allocation and management of critical resources like qualified faculty. Effectively navigating these challenges requires robust Strategic Planning informed by a clear understanding of both the internal institutional environment and the external operating context.

Strategic Analysis Frameworks

Strategic planning in this context often begins with a comprehensive assessment of an institution's Strengths, Weaknesses, Opportunities, and Threats (SWOT). SWOT analysis provides a valuable framework for identifying key internal and external factors that can influence strategic success. However, traditional SWOT analysis has limitations, particularly in quantitatively prioritizing the identified factors and the strategic alternatives derived from them. To address this, Multi-Criteria Decision Analysis (MCDA) methods are increasingly employed.

The Analytic Hierarchy Process (AHP)

Among MCDA techniques, the Analytic Hierarchy Process (AHP), developed by Saaty, is a widely recognized tool for structuring complex decision problems hierarchically and deriving priorities based on systematic pairwise comparisons. AHP's capacity to incorporate both qualitative judgments and quantitative data makes it particularly suitable for complex strategic decision-making in diverse fields, including higher education management and project selection.

SWOT-AHP Integration

To further enhance the rigor of strategic decision-making, a hybrid approach integrating SWOT analysis with AHP, often referred to as SWOT-AHP Integration, has gained prominence. This integrated methodology allows decision-makers to systematically evaluate SWOT factors and then prioritize strategic alternatives quantitatively, thereby overcoming the inherent subjectivities of standalone SWOT analysis. This integrated methodology has been effectively applied in various planning contexts, including environmental management and higher education strategy formulation. The structured nature of the SWOT-AHP approach facilitates the incorporation of stakeholder preferences and provides a transparent, evidence-based foundation for selecting the most appropriate strategies.

Given the challenge faced by XYZ University's Computer Engineering program specifically, how to manage lecturer reallocation necessitated by internationalization without compromising the main program's quality a strategic planning approach that allows for systematic evaluation of alternatives is crucial. The existing literature highlights the complexities of resource management in HEI internationalization and points to integrated decision-making tools like SWOT-AHP as effective means to address such issues. This leads to the central focus of this research, which aims to answer the following questions:

1. What are the key strategic criteria (strengths, weaknesses, opportunities, and threats) influencing the Computer Engineering program at XYZ University in the context of its internationalization and associated lecturer transfer?
2. What are the viable alternative strategies that the program can consider to mitigate the risks associated with lecturer reallocation while supporting the internationalization initiative?
3. Which of these alternative strategies is the most suitable for the Computer Engineering program to adopt, based on a systematic evaluation against the identified criteria and stakeholder input?

RESEARCH DESIGN

Method is a method of work that can be used to obtain something. While the research method can be interpreted as a work procedure in the research process, both in searching for data or disclosing existing phenomena (Zulkarnaen, W., et al., 2020:229).

This study employed a mixed-method research design to develop and prioritize a strategic plan addressing lecturer reallocation within the Computer Engineering program at XYZ University, a consequence of its internationalization initiative. The approach integrated qualitative environmental analysis to identify strategic factors and generate alternatives, with a multi-criteria decision-making technique, the Analytic Hierarchy Process (AHP), used for strategy prioritization.

The research context was the Computer Engineering program at XYZ University. Participants for the qualitative data collection phase were purposively selected key academic stakeholders, including the Head of Program, Secretary of Program, and senior faculty members, chosen for their direct involvement and deep understanding of the program's operations and strategic challenges. For the AHP phase, eight experts from the Computer Engineering program were selected based on their expertise and ability to make informed judgments on strategic priorities.

Primary data collection involved two stages. Initially, qualitative data regarding internal strengths and weaknesses were gathered through semi-structured interviews using a thematic interview guide. External opportunities and threats were identified through an analysis of secondary data, including academic literature, industry reports, and institutional documents, which informed the PESTLE and Porter's Five Forces analyses. Subsequently, quantitative data for strategy prioritization were collected using a structured AHP questionnaire, requiring experts to perform pairwise comparisons of criteria, sub-criteria, and alternatives on Saaty's 1-9 fundamental scale.

Data analysis was conducted sequentially. Qualitative data from interviews were subjected to thematic analysis to identify and categorize internal strategic factors. External environmental factors were synthesized using PESTLE and Porter's Five Forces frameworks. These internal and external factors were then integrated into a SWOT (Strengths, Weaknesses, Opportunities, Threats) matrix, from which seven strategic alternatives were systematically generated using a TOWS matrix. The AHP was then applied to analyze the expert judgments. This involved constructing a hierarchical decision model (Goal, SWOT criteria, SWOT sub-criteria, and strategic alternatives), calculating local and global priority weights using the eigenvalue method, and ranking the strategic alternatives. The consistency of expert judgments was rigorously assessed using the Consistency Ratio (CR), with a threshold of CR < 0.10

deemed acceptable to ensure the validity of the results. Expert Choice software facilitated the AHP computations and sensitivity analysis.

RESULT AND DISCUSSION

This chapter presents the findings of the research conducted to develop and prioritize strategic alternatives for the Computer Engineering program at XYZ University in response to challenges posed by internationalization and lecturer reallocation. The results from the internal and external environmental analyses, the formulation of strategic alternatives, and their subsequent prioritization using the Analytic Hierarchy Process (AHP) are detailed. This is followed by a discussion of these findings, their interpretation, and answers to the research questions.

The prioritization of strategic alternatives through AHP involved a panel of eight experts. These experts were key academic stakeholders from the Computer Engineering program at XYZ University, including the Head of Program, Secretary of Program, and senior faculty members. Their selection was based on their extensive experience, in-depth knowledge of the program's operations, and understanding of the strategic context, ensuring informed and relevant judgments for the AHP pairwise comparisons.

The initial phase of the research focused on identifying key internal and external factors that could influence the program's strategic direction.

Thematic analysis of interviews with internal stakeholders revealed several key strengths and weaknesses within the Computer Engineering program.

- **Strengths:** Notable strengths included the program's qualified faculty members, its established digital readiness including a robust Learning Management System (LMS) and experience with hybrid learning, and strong multi-industry partnerships that provide real-world exposure and collaboration opportunities.
- **Weaknesses:** Significant weaknesses identified were primarily centered on lecturer availability limitations due to the impending reallocation for the international class, a general unawareness among faculty regarding existing multi-department collaboration mechanisms, uncertainty in how resources would be shared between the main and international programs, and persistent challenges in recruiting a sufficient number of qualified new lecturers.

The external environmental scan, conducted using PESTLE and Porter's Five Forces analyses, identified key opportunities and threats.

- **Opportunities:** Key opportunities included the rapid advancement of Internet of Things (IoT) and internet-based technologies supporting global learning models, strong university support and push for internationalization initiatives, and the potential for global collaboration with other industries and universities.
- **Threats:** The primary threats identified were intense competition in both international and domestic higher education, the rise of alternative education models (e.g., MOOCs, online certifications), and the potential for operational disruption within the main program due to the lecturer transfer.

Based on the identified internal and external factors, a SWOT (Strengths, Weaknesses, Opportunities, Threats) matrix was constructed. Subsequently, a TOWS matrix was employed to generate seven distinct strategic alternatives. These strategies were designed to leverage strengths to capitalize on opportunities (SO strategies), use strengths to mitigate threats (ST strategies), overcome weaknesses by taking advantage of opportunities (WO strategies), and minimize weaknesses while avoiding threats (WT strategies). The generated strategies included approaches such as leveraging digital readiness and industry partnerships for hybrid learning, engaging alumni, developing co-teaching schemes with global partners, and traditional hiring.

The seven strategic alternatives were then evaluated and prioritized using the Analytic Hierarchy Process (AHP). The quantitative outputs from the AHP are primarily priority weights and consistency ratios, rather than traditional descriptive statistics like mean or standard deviation.

The AHP analysis first determined the relative importance of the four main SWOT criteria with respect to the goal of maintaining quality and operational activities in the Computer Engineering program during internationalization. As shown in Figure 1 "Strength" emerged as the most critical decision criterion with a priority weight of 41.0%, followed by "Opportunity" (26.5%), "Weakness" (17.3%), and "Threat" (15.2%). This indicates that stakeholders perceive leveraging the program's inherent strengths as the most influential factor in achieving the goal. The pairwise comparisons for criteria yielded a Consistency Ratio (CR) of 0.05, well within the acceptable threshold of <0.10 (See Figure I)

Within each main criterion, specific sub-criteria (SWOT factors) were also weighted. For instance, under "Strength," 'Multi-industry partnership' (S5) received the highest local priority (30.7%) and global priority (12.6%). Under "Weakness," 'Lecturer availability limitation due to reallocation' (W1) was the top concern (local priority 29.0%, global priority 5.0%). Among "Opportunities," 'The Rapid Advancement of IoT and Internet-based technologies' (O1) and 'University push for internationalization' (O4) were highly prioritized (both around 27% local priority, 7.2% global priority). For "Threats," 'Intense competition in international and domestic higher education' (T1) was deemed the most pressing (local priority 40.2%, global priority 6.1%). All sub-criteria comparisons maintained good consistency (CR < 0.10). (Detailed weights are available in the Appendix

The final phase of the AHP involved synthesizing the priorities to rank the seven strategic alternatives. Figure 2 presents this overall ranking. Strategy SO1: "Utilize industry partnerships and digital readiness to deliver IoT-integrated hybrid learning, reducing lecturer dependency" achieved the highest global priority score of 18.2%. This was followed by SO7 (Diversify mitigation through adjuncts/experts) at 16.0% and SO2 (Engage alumni/industry professionals as guest lecturers) at 14.9%. The strategy involving traditional hiring of new teaching staff (SO6) received the lowest priority (11.9%). The overall AHP model demonstrated excellent consistency with a CR of 0.03 (See Figure II).

Discussion

The Results Of This Study Provide Clear Answers To The Research Questions And Offer Significant Insights for the Computer Engineering program at XYZ University.

- **Answering Research Questions:**
  - The first research question regarding the key criteria for strategy formulation was addressed through the identification of specific strengths (e.g., digital readiness, industry partnerships), weaknesses (e.g., lecturer availability), opportunities (e.g., IoT advancements), and threats (e.g., competition). These factors and their AHP-derived weights serve as the core criteria.
  - The second research question concerning possible alternative strategies was answered by the generation of seven distinct strategies via the TOWS matrix, ranging from leveraging technology to alternative staffing models.

- The third research question, seeking the best-fit strategy, was answered by the AHP analysis, which prioritized SO1: "Utilize industry partnerships and digital readiness to deliver IoT-integrated hybrid learning, reducing lecturer dependency" as the most suitable approach.

Interpretation of Key Findings: The prioritization of SO1 (18.2%) is a significant finding. Its components leveraging existing industry partnerships, utilizing the program's digital readiness, and integrating IoT into a hybrid learning model directly address the core challenge of lecturer dependency while aligning with major strengths and opportunities. The strong emphasis placed by experts on the "Strength" criterion (41.0%) in the AHP underscores why a strategy that builds upon existing assets (like S5: Multi-industry partnership and S3: Digital Readiness) is favored. The high ranking of SO1 is further supported by its effective alignment with highly weighted opportunities such as O1: 'The rapid advancement of IoT and internet-based technologies' This suggests a proactive approach, transforming a potential crisis (lecturer shortage) into an opportunity to innovate teaching delivery and enhance industry integration. The lower ranking of SO6 ("Hire new teaching staff"), despite the evident lecturer shortage, likely reflects the stakeholders' realistic assessment of the challenges in faculty recruitment (identified as weakness W4). This highlights a preference for innovative internal solutions and leveraging external collaborations over relying solely on traditional, and often slow, hiring processes. The relatively high scores for SO7 and SO2 also point towards a pragmatic approach of exploring flexible, alternative human resources such as adjunct lecturers, industry experts, and alumni to supplement teaching capacity.

Practical Implications and Recommendations: The primary implication for the Computer Engineering program at XYZ University is the clear directive to focus on developing and implementing an IoT integrated hybrid learning model by actively engaging its industry partners and leveraging its current digital infrastructure. This strategy not only mitigates the risk of lecturer shortage but also positions the program to be more resilient, technologically advanced, and industry relevant. Practical steps would involve co developing curriculum modules with industry partners, training faculty in hybrid pedagogy, and ensuring robust technological support. Furthermore, the university should consider institutional policy reviews to foster greater flexibility in lecturer deployment and inter departmental collaboration, which was identified as an

area of unawareness. This study provides an evidence based framework that can assist other higher education institutions in strategically managing resources during internationalization, ensuring that expansion initiatives enhance rather than compromise core academic quality.

CONCLUSION

This research aimed to develop a strategic plan to address the challenges faced by the Computer Engineering program at XYZ University due to lecturer reallocation necessitated by its internationalization initiative. Utilizing a mixed-method approach that integrated qualitative environmental analysis (Thematic Analysis, PESTLE, Porter's Five Forces) with a quantitative multi-criteria decision-making technique (Analytic Hierarchy Process - AHP), the study successfully identified key strategic factors, formulated viable alternative strategies, and prioritized the most effective approach.

The primary conclusion drawn from this research is that the strategy SO1: "Utilize industry partnerships and digital readiness to deliver IoT-integrated hybrid learning, reducing lecturer dependency," with a global priority of 18.2%, is the most suitable strategic option for the Computer Engineering program. This prioritization emerged from a rigorous AHP analysis, which demonstrated strong model consistency (overall CR=0.03), and highlighted the importance of leveraging the program's existing strengths such as qualified faculty, digital readiness, and industry partnerships and capitalizing on external opportunities like IoT advancements and university support for internationalization. The study successfully answered its research questions by defining the strategic criteria, generating seven distinct strategic alternatives, and determining the optimal strategy through the AHP framework.

Implications of the Research

The findings offer significant practical implications for the Computer Engineering program at XYZ University. The foremost implication is the recommendation to prioritize the development and implementation of an IoT-integrated hybrid learning model. This approach can mitigate the risks associated with lecturer shortages by reducing dependency on traditional face-to-face teaching and leveraging technology and external expertise. To facilitate this, the program should actively engage its industry partners for co-curriculum development and guest lecturing, and fully utilize its existing digital infrastructure. Furthermore, the university administration is

encouraged to review and enhance internal policies to support cross-departmental collaboration and flexible lecturer deployment, addressing an identified area of limited awareness.

Theoretically, this study contributes an evidence-based SWOT-AHP framework that can be adapted by other higher education institutions (HEIs) facing similar resource management challenges during internationalization. It underscores the value of integrating qualitative insights with quantitative decision-making tools for robust strategic planning in complex academic environments.

Limitations of the Research

This study has several limitations that should be acknowledged. The research focused primarily on strategies for faculty resource management within the main Computer Engineering program and did not delve into the operational details of setting up the international class, its financial planning, or comprehensive curriculum development for the new program. The AHP stakeholder panel, while composed of experts from the program, was limited in number, which may affect the generalizability of the specific AHP weightings to the entire university. Additionally, the data were collected at a specific point in time and thus reflect the situation and perspectives prevalent during that period. The study employed strategic analysis methods and did not involve statistical hypothesis testing.

Suggestions for Future Research

Building upon the findings and limitations of this study, several avenues for future research are recommended. Longitudinal studies could evaluate the long-term impact of the international class establishment and the implemented strategies on student learning outcomes, faculty performance and workload, and overall institutional resilience. Further research could also explore the financial implications and infrastructure requirements for sustaining technology-enhanced learning models like the proposed IoT-integrated hybrid learning. Comparative studies across different departments or universities implementing similar internationalization strategies could also yield valuable insights into best practices and common challenges in managing faculty resources within the broader higher education sector.

REFERENCES

Begičević, N., & Divjak, B. (2009). Decision Making on Project Selection in High Education Sector Using the Analytic Hierarchy Process. Zagreb.

British Council Org. (2024). *The outlook for international student mobility: amidst a changing global macroeconomic landscape.*

Brown, J.-H., & Oplatka, I. (2015). *Higher Education Consumer Choice.* London: Palgrave Macmillan.

De Wit, H. (2019). INTERNATIONALIZATION IN HIGHER EDUCATION: A critical review. SFU Educational Review.

De Wit, H. (2020). Internationalization of Higher Education:The Need for a More Ethical and Qualitative Approach. *Journal of International Students*.

European University Association. (2024). *Trends 2024: European higher education institutions in times of transition.*

France Strategie. (2015). Diambil kembali dari Haut-commissariat à la Stratégie: https://www.strategie.gouv.fr/en/publications/investir-linternationalisation-de-lenseignement-superieur-0

Fred R, D. (2011). *Strategic Management.* Prentice Hall.

International Association Universities. (2024). *Internationalization of Higher Education: Current Trends and Future Scenarios.* IAU.

Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization.* Canada: Sense Publishers.

Kurtilla, M., & M, P. (2000). Utilizing the analytic hierarchy process (AHP) in SWOT analysis. A hybrid method and its application to a forest-certification case. *Forest Policy and Economics*.

Porter, M. (2008). *The five competitive forces that shape strategy.*

Posselt, J., & E. Hernandez, T. (2019). Evaluation and Decision Making in Higher Education.

Saaty, T. L., & Vargas, L. G. (2012). *Models, Methods, Concepts & Applications of the Analytic Hierarchy Process.* Springer.

Shinno, H., & H, Y. (2006). Quantitative SWOT analysis on global competitiveness of machine tool industry. *Journal of Engineering Design*.

Simek, L., & Stewart, W. H. (2024). International student recruitment and support in Indonesia: A systematic review of literature from 2012-2022. *Journal of Studies in International Education*.

V, B., & V, C. (2006). *Using thematic analysis in psychology. Qualitative Research in Psychology.* University of West England.

Vogtle, E. M., & Windzio, M. (2024). Does academic freedom matter for global student mobility? . *The International Journal of Higher Education*.

Wang, N., & Nan, Z. (2025). Trends in the Internationalization of Higher Education: A Review of Internationalization at Home in China and other Countries. *International Journal of Academic Research in Progressive Education & Development*.

Wihardja, M. M., & Basri, C. (2025, March 27). *Fulcrum*. Diambil kembali dari Fulcrum : https://fulcrum.sg/growing-or-shrinking-how-indonesias-middle-class-is-really-doing/

Yavuz, F., & Tuzin, B. (2013). Use of swot and analytic hierarchy process integration as a participatory decision making tool in watershed management. *6th International Conference on Information and Communication Technologies in Agriculture, Food and Environment (Haicta 2013)* . Istanbul: Elsevier.

Zulkarnaen, W., Fitriani, I., & Yuningsih, N. (2020). Development of Supply Chain Management in the Management of Election Logistics Distribution that is More Appropriate in Type, Quantity and Timely Based on Human Resources Competency Development at KPU West Java. MEA Scientific Journal (Management, Economics, & Accounting), 4(2), 222-243. https://doi.org/10.31955/mea.vol4.iss2.pp222-243.

FIGURE, CHART AND TABLE

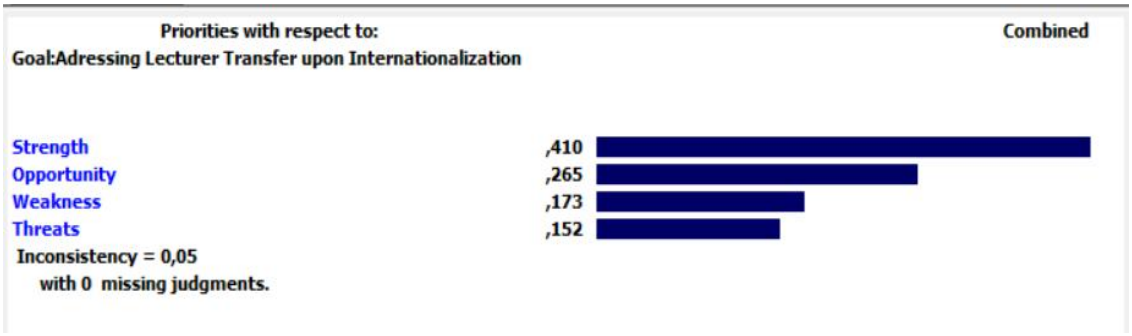

Figure I (Criteria with respect to goal)

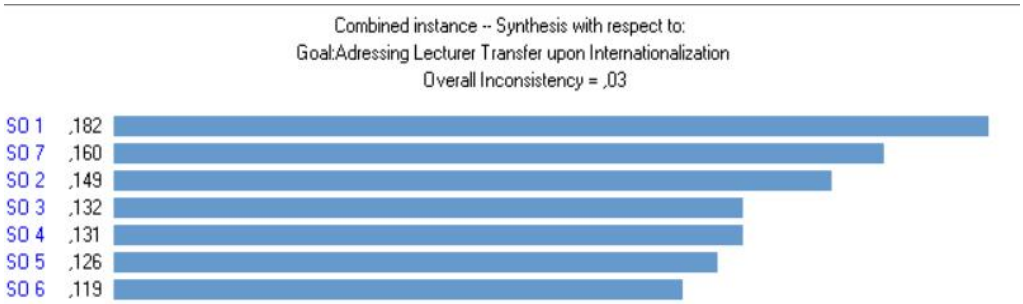

Figure II Prioritized Strategies (Author, 2025)

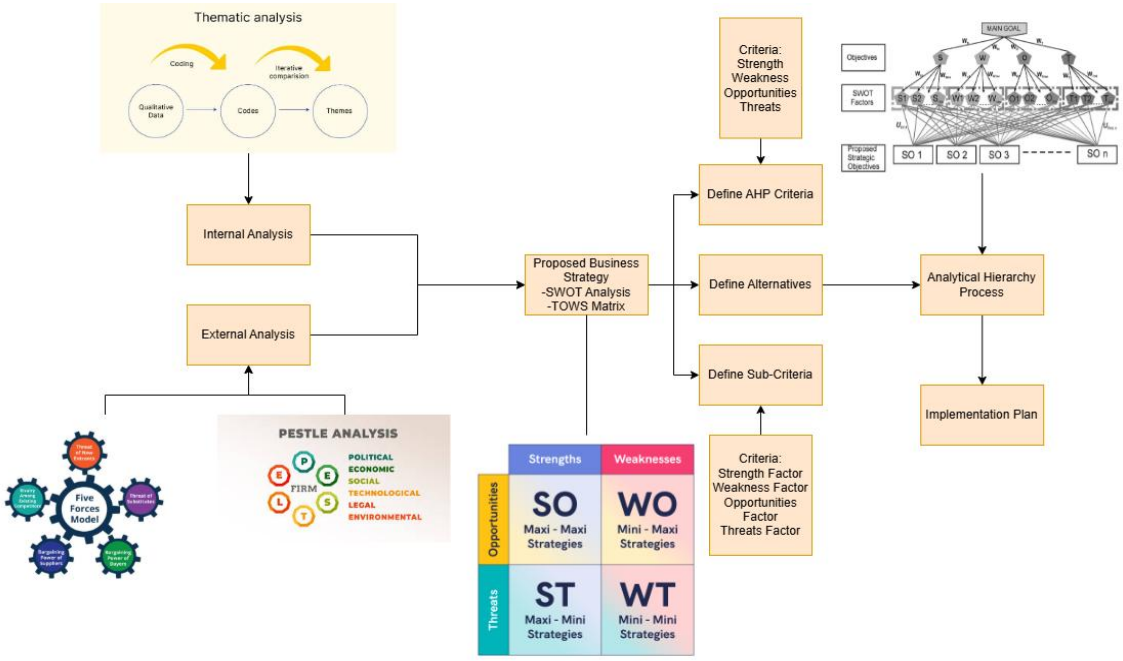

Figure III Conceptual Framework (Author, 2025)

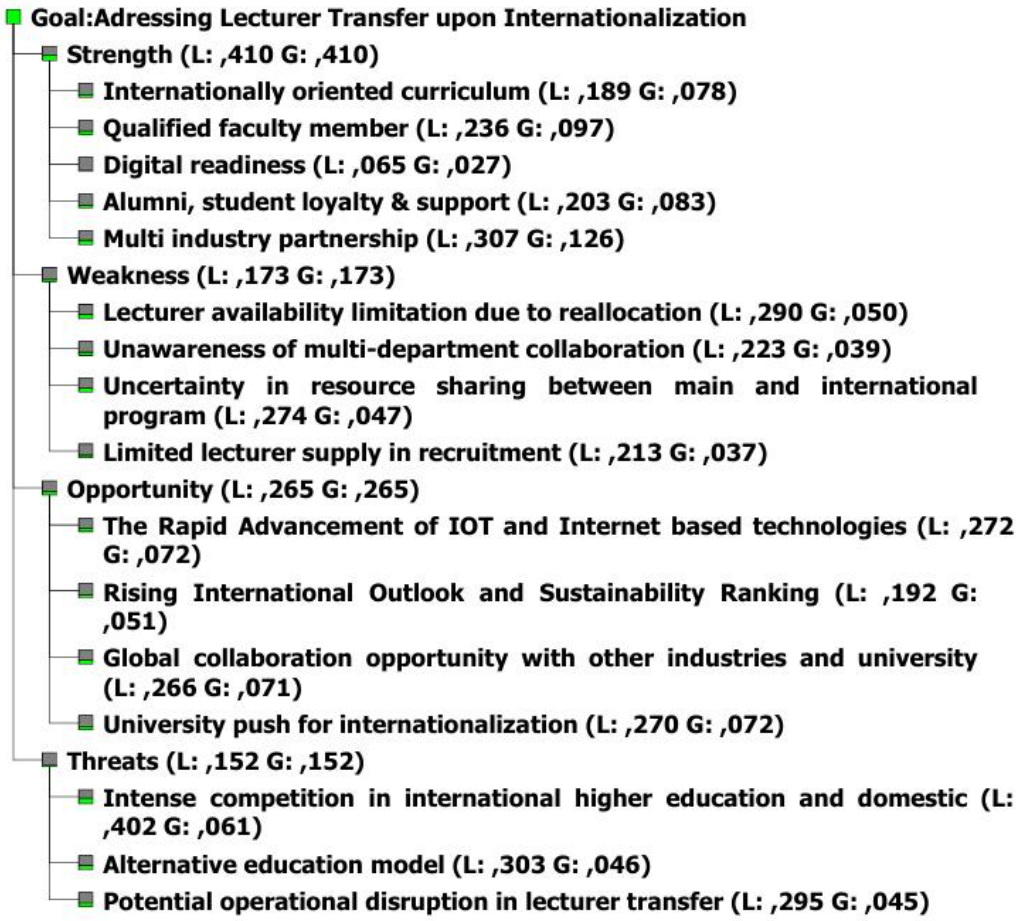

Figure IV AHP Result Tree (Author, 2025).