



Strategic Acceleration of Academic Rank Promotion for Lecturers: An Analytical Hierarchy Process (AHP) Approach

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Abstract. The objective of this study is to identify the institutional strategies that would fast-track the academic rank promotion process in a private higher learning institution in Indonesia. AHP method using a group decision-making approach, where the participants are four experts in academics, has been used in this research with Expert Choice 11 software to perform the pairwise comparison analysis. Based on the results, it is clear that scientific publication requirements hold the highest weight (0.471) as a determinant factor, and optimizing integrated administrative support units holds the highest priority as a strategy (0.373). From brief discussion, although the stress on publications is consistent with the trend in the world academic circle, support within the institution is more crucial than monetary motivation. Conclusion reveals that administration efficiency and writing skills are the best two accelerators. This study provides a strategic framework for university management to enhance institutional competitiveness and lecturer productivity.

Keywords: Analytical Hierarchy Process (AHP), Academic Rank Promotion, Higher Education Management, Institutional Strategy, Scientific Publication

1 Introduction

In the contemporary global higher education sector, the academic rank promotion of faculty members has become an important component in ensuring the quality, research output, and accreditations of institutions. Academic rank promotion is accelerated strategically by making use of appropriate mechanisms to balance the conflicting priorities of the institution via the utilization of sophisticated decision-making tools like the Analytical Hierarchy Process (AHP) to enable prioritization of criteria based on the assessment of expert judgments. For Indonesia, this is exacerbated by the national policy which requires strict standards in teaching and publishing abroad. According to empirical findings from the report published in 2024 [1], on Higher Education Statistics, there is a "bottleneck" issue with the advancement in careers in the country, where out of 303,067 lecturers, most are in lower to middle ranks, 117,189 are Lecturer (Lektor). On the other hand, only 11,506 people (about 3.8%) hold the title of Professor. The large

discrepancy between the two titles is especially problematic for private universities in attaining global competitiveness [2].

Many studies have thoroughly covered the obstacles for advancement in academic careers. For example, [3]. pointed out that the "publish or perish" mentality is a universal source of stress that compels organizations to reassess their policies. With regard to workloads, [4]. found that over-commitment to administrative activities is still one of the major inhibitors of scientific output, particularly in small private companies that lack financial support. In terms of digitization, [5] and [6] stressed that although digitalization and strategic HRM are essential factors for academic success, they also create additional challenges that need to be overcome through sustainable strategies. Besides, [7] underscored the importance of proper resource management for HEIs to compete successfully, while [8]. discussed how participation profiles in virtual academic networks could impact professional involvement and documentation.

However, even with these findings, an evident research gap exists in the form of a lack of a systematic, multi-criteria strategy in terms of institutional actions. Even though prior research highlights what problems exist, the literature lacks analytical frameworks that can make clear which of the strategies to use in order of priority, considering limited resources. This research fills the void by presenting a unique approach based on AHP, where the experts' assessments lead to prioritization and implementation of actions [9]. In terms of academics, this study presents a unique contribution to strategic human resource management in universities. In terms of practice, it offers a tool for universities' administration to address the promotion problem and improve competitiveness.

The main purpose of this research is to determine the most appropriate institutional policies that can be used to speed up the process of promoting academics to higher ranks at an Indonesian private university. The research utilizes the Analytic Hierarchy Process (AHP) technique by considering group decision making conducted by four academic experts. Using this technique will enable the identification of the hierarchical structure of barriers related to promotion into higher ranks in terms of objectives, criteria, and sub-criteria. This can be done through the use of Expert Choice 11 software.

2 Literature Review

2.1 Strategic Human Resource Management and Academic Career Progression

Career advancement in the academic field is no longer seen simply as personal success but also as a strategic resource. According to [7]. in a world where competition in higher education continues to intensify, institutional survival requires that complex resources be managed strategically for the maintenance of global prestige. It can be argued through critical review that academic promotions form an important strategic tool in this process. Nonetheless, institution-driven goals tend to contradict the "publish or perish" culture at the global level [3]. point out that heavy emphasis on international publications disregards teaching ability.

In the Indonesian case, especially at private higher education institutions (PHEIs), such a conflict is further amplified through structural imbalances. As stated in the report on Higher Education Statistics 2024 by PDDikti, there is a serious imbalance in the academic ranks where Lectors (Lektor) outnumber Professors immensely. The above fact empirically justifies the argument raised by [4], which states that workload allocation in academics is often disproportionate; administrative responsibilities often hamper the scholarly efforts necessary for promotion. It can thus be deduced from the above review of literature that without appropriate institutional measures, academics at PHEIs in Indonesia are likely stuck in a “promotion bottleneck” because of inappropriate workload allocation and global publishing pressure [2].

2.2 Digital Transformation and Administrative Efficiency

It should also be noted that digital transformation is often suggested as an answer to the issue of administrative efficiency; however, contemporary literature suggests a more skeptical position regarding this approach. As pointed out by [6], sustainable digital management is crucial in the context of higher education, which means that digital transformation should not become another task that requires additional effort. These results are also supported by [5].

The relationship between these researches suggests that there are usually systemic and technological obstacles to promotions. Moreover, according to [8], engagement profiles within digital academic environments affect the recording of the accomplishments made by academics. Thus, the concept of administrative digitalization used in this study cannot be regarded simply as a technological instrument, but rather as an environmental factor that may speed up or slow down the process of accumulating credit points (KUM) by Indonesian academics.

2.3 Multi-Criteria Decision Analysis via Analytic Hierarchy Process (AHP)

The choice of AHP as the methodology to be used in this research study lies in its high efficiency in breaking down complex and unstructured decision-making situations. As per Saaty (2008), "The AHP has greater effectiveness in solving decision-making problems than other methods such as the simple additive weighting (SAW) approach, because of its particular advantage in dealing with inconsistent expert judgment." The above assertion is supported by [10] and [11], who state that AHP is the best technique for generating priorities in managerial cases of conflicting criteria.

A particular knowledge gap will be discussed in the current research. According to [9], AHP has been proved to be effective in construction and project management, but it has not been used to define strategic priorities and to address faculty promotion problems in Indonesian PHEIs. The current literature is largely descriptive on the topic, offering no recommendations on what can be done. This paper contributes to the area because it uses the methodology in question to turn expert knowledge into strategy in terms of promotion-acceleration initiatives.

3 Methodology

3.1 Research Design and Method Selection

The current investigation uses a quantitative descriptive research design utilizing the Analytical Hierarchy Process (AHP). AHP was chosen as the appropriate tool for this research because it is exclusively applicable for addressing multi-criteria problems in decision making through breaking down those problems into hierarchical order [12]. AHP is very suitable for use in this study in contrast to other linear procedures, like Simple Additive Weighting (SAW), because it is capable of prioritizing institutional strategies through turning subjective expert preferences into numerical weights [11].

3.2 Expert Selection and Justification

Data were gathered from four (4) academics who have extensive institutional knowledge and strategic decision-making capacity. For AHP, the use of a limited number of subjects is scientifically grounded since the technique utilizes “representative expertise” and not “statistical representation” [10]. The necessity for having few data sources was pointed out by [9]. if the requirements for experts are very strict. Experts used in this research meet the following purposive criteria:

- (i). Competency: Holding an advanced academic qualification (Doctorate Degree) and a certain level of professional position (Associate Professor or Lektor Kepala).
- (ii). Experience: Having at least 10 years of experience as a member of the faculty.
- (iii). Position: Currently holding or formerly occupying a key post (such as Rector, Vice-Rector, or Head of Human Resources) that deals with faculty promotion.

Limitation: Even though a limited number of experts is likely to provide valuable insights, it might be hard to generalize about other university institutions. Yet, if it comes to developing an institutional roadmap, this criterion is perfectly reasonable.

3.3 Variable Operationalization

The criteria and sub-criteria used in the hierarchical process of AHP have been defined by the literature and adapted to the local context of Indonesia [4] for workload and [3]. for publication pressures). The variables have been arranged in a hierarchical order of three levels: Goal (Fast Track Academic Rank Promotion), Criteria (e.g., Organizational, Personal, Digital), and Sub-Criteria (action plan).

3.4 Data Collection and AHP Steps



Fig. 1. AHP research process.

Data collection procedures were carefully planned in order to obtain depth and consistency in expert judgments. Figure 1 above shows how data collection was done systematically from recognizing the "bottleneck" of promotion to formulating strategic priorities. Data collection involved the following four stages:

- (i). Presentation and Briefing: The author conducted individual presentations to each of the experts, ensuring all understood the same AHP hierarchy model. In this case, the structure of the hierarchy (see Fig. 2) and each criterion was explained to ensure consistency.

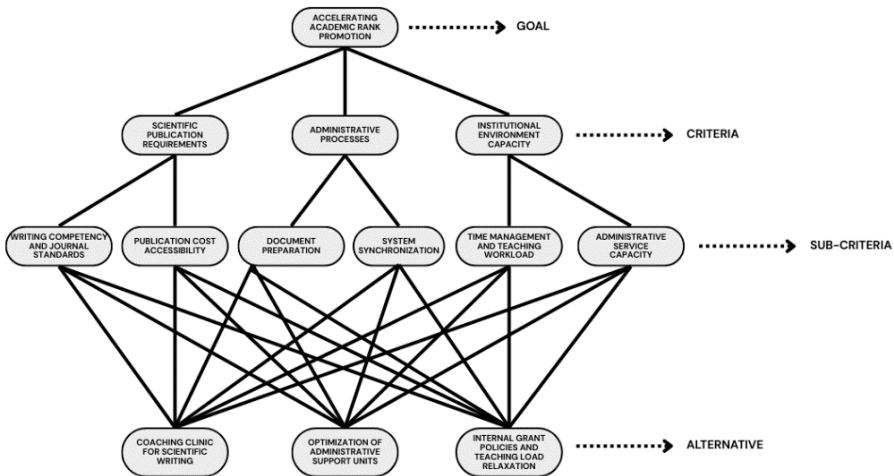


Fig. 2. AHP hierarchical model.

- (ii). Collection of Expert Opinions Through Pairwise Comparison: The information collection technique was an expert structured interview where each expert was required to compare all elements in each level of the hierarchy in a pairwise manner. For this purpose, a questionnaire (based on Saaty's fundamental 1-9

scale – Table 1) was developed which asked about the relative importance between two elements ("How much more important is Institutional Support than Digital Infrastructure in the acceleration of academics' promotions?").

Table 1. Saaty's Fundamental scale for pairwise comparison

Scale	Definition	Explanation
1	Equal importance	Two elements contribute equally
3	Moderate importance	Slightly favor one over another
5	Strong importance	Strongly favor one over another
7	Very strong importance	Dominance demonstrated in practice
9	Extreme importance	Highest level of importance
2,4,6,8	Intermediate values	Compromise between adjacent values

- (iii). Consistency Verification during Data Collection: While conducting the interview and entering the data into AHP software, the consistency ratio (CR) was checked. If an expert's answers generated $CR > 0.1$, the interview continued until the expert was able to improve the CR below this threshold value.
- (iv). Aggregation of Group Judgments: All individual judgments obtained from individual matrices were consolidated into one representative group judgment applying Geometric Mean approach.

The analysis of the AHP process has been done in a systematic manner with the help of Expert Choice 11, as follows:

- (i). Decomposition: This includes dividing the problem into three hierarchical levels (Goal, Criteria, and Sub-criteria).
- (ii). Comparative Analysis: Creating a $n \times n$ matrix to compute local priorities at each level.
- (iii). Priorities Synthesis: This includes multiplication of local priorities within the hierarchical structure to find out the global priorities of the plans of action.
- (iv). Sensitivity Analysis: This step was conducted to see the impact of the change in priority of any criterion on the entire approach.

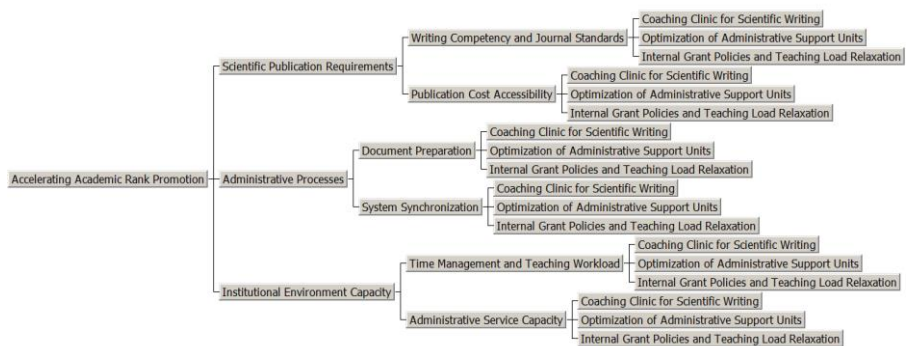


Fig. 3. Hierarchical model in expert choice 11.

3.5 Validity and Reliability

Validity in AHP is established using the "Content Validity" approach, where the criteria come from established literature and are confirmed by experts prior to the evaluation process. The Reliability factor is demonstrated in the Consistency Ratio (CR). When the CR is $< 10\%$ (0.1), then it can be inferred that the judgments provided by the expert are consistent and logical [12].

4 Results and Discussion

4.1 Results

Priority ranking of strategies to promote academic rank was carried out through Expert Choice 11, summarizing the combined opinion of four academics. These findings are illustrated through three hierarchical levels: primary criteria, secondary criteria, and strategic options.

Weighting of Main Criteria. The synthesis of expert judgment at the criteria level reveals a clear focus on substantive academic requirements. As shown in Table 2 and the Expert Choice output in Figure 4, Scientific Publication Requirements emerged as the most dominant criterion with a priority weight of 0.471. This is followed by Institutional Environment Capacity (0.376), while Administrative Processes (0.153) was perceived as the least significant among the three. The Inconsistency Ratio of 0.00229 confirms that the expert evaluations are highly consistent and reliable, far below the maximum threshold of 0.1.

Table 2. Priority weights of main criteria.

Criteria	Priority Weight
Scientific Publication Requirements	0.471
Institutional Environment Capacity	0.376
Administrative Processes	0.153

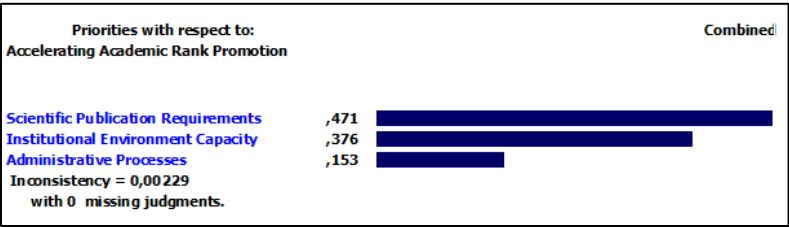


Fig. 4. Priority weights of main criteria.

Priority Weights of Sub-Criteria and Strategic Alternatives. At the sub-criteria level, the global weights (representing the combined influence of criteria and sub-criteria) highlight the critical areas for institutional intervention. According to Table 3, Writing Competency and Journal Standards (0.371) holds the highest global weight, reinforcing that publication quality is the primary hurdle. This is followed by Administrative Service Capacity (0.244).

Table 3. Global priority weights of sub-criteria.

Criteria	Sub-Criteria	Global Weight
Scientific Publication	Writing Competency and Journal Standards	0.371
Institutional Environment	Administrative Service Capacity	0.244
Institutional Environment	Time Management and Teaching Workload	0.132
Scientific Publication	Publication Cost Accessibility	0.100
Administrative Processes	System Synchronization	0.087
Administrative Processes	Document Preparation	0.066

Lastly, the prioritization phase of the AHP study generates the strategic alternatives map. As shown in Table 4 and summarized in the consolidation of results presented in Figure 5, the first priority is set as the Optimization of Administrative Support Units (0.373). Second, there is the establishment of Coaching Clinics for Scientific Writing (0.332), while third is Internal Grant Policies and Teaching Load Relaxation (0.296). Given the low level of inconsistency (0.02), these results can be statistically substantiated.

Table 4. Global priority of strategic alternatives.

Alternative Strategy	Priority Weight	Rank
Optimization of Administrative Support Units	0.373	1
Coaching Clinics for Scientific Writing	0.332	2
Internal Grant Policies and Teaching Load Relaxation	0.296	3

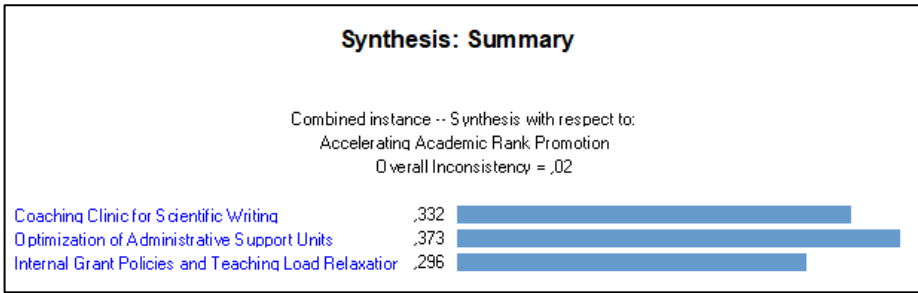


Fig. 5. Global ranking of strategic alternatives.

4.2 Discussion

Interpretation of Scientific Publication Dominance. From the above findings, it is very clear that Scientific Publication Requirements (0.471) is the most important area of focus. According to the above finding, the bottleneck for academic advancement in the university is highly associated with the challenges of producing research. The findings support the assertion by [3], who claim that due to the publish or perish policy that exists globally, the publication metrics have become the most important obstacle to academic career advancement. Due to the national accreditation process in Indonesia, private universities have been forced to give more priority to research skills than administrative skills.

Critical Analysis of Strategic Alternatives. Interestingly, while publications are the main criteria, the top alternative strategy is the Optimization of Administrative Support Units (0.373). This interpretation suggests that while the goal is publication, the execution is often hindered by bureaucratic inefficiency. Abad-Segura et al. (2020) emphasize that sustainable institutional performance depends on the efficiency of support systems. Furthermore, the high ranking of Coaching Clinics (0.332) reflects the need for human resource development in writing competency, aligning with Purwanto et al. (2023) who state that digital and strategic transformation must be accompanied by faculty skill enhancement.

Workload and Institutional Support. The third point in the priority list – Internal grant policies and reduced teaching loads (0.296) – tackles the structural issue identified by [4]: too much teaching and administration workload hampers research output. With this approach, the university helps solve lecturers’ problem of “time poverty,” which does not allow them to get the title of Professor, as indicated in [1]. Such structural changes are required for competitive prestige [2];[7].

Contribution to Research Gap and Practical Implications. This study fills the identified research gap by moving beyond a descriptive list of barriers and providing a quantified priority roadmap. Practically, university management should not treat all support

programs equally; instead, they should prioritize the revitalization of administrative units and writing support clinics. Using the AHP framework as validated by [11] and [9], this research provides a measurable tool for university leaders to allocate budgets and resources where they will have the most significant impact on faculty promotion acceleration.

Limitations and Future Research. Even though the findings show strong evidence (Inconsistency 0.02), one weakness about this study is that it involves a case-specific study conducted at a particular private university. These strategic priorities have been found in accordance with the administrative maturity of the surveyed organization. Further studies might adopt a broad pool of experts in different organizational levels to find out whether these priorities are consistent throughout Indonesia [8].

5 Conclusion and Recommendation

This study proves that rapid advancement in academic rank at Indonesian private institutions calls for an integrated approach with emphasis on scientific publications and administrative management. Using the Analytic Hierarchy Process (AHP) method, it is revealed that although Scientific Publication Requirements are the most important criteria (0.471), the best strategic alternatives are the Optimization of Administrative Support Units (0.373) and Coaching Clinics for Scientific Writing (0.332). The main contribution of this study to the literature gap is that it goes further than descriptive explanation of the barriers to career development to offer a set of quantitatively prioritized solutions. In practice, the findings imply that universities need to overcome the "promotion bottleneck" pointed out in the report "PDDikti 2024" through alleviating the workload of professors and offering systematic incentives for conducting research. Future research directions include broadening the scope of the study through carrying out comparative analyses of the prioritization process using AHP among diverse groups of university clusters (i.e., leading vs. growing universities) to establish whether there is any change in their strategic preferences contingent upon the degree of development of the institution itself. Also, future research should consider combining the use of TISM with the AHP method to examine the causality among those strategic variables and comprehend the extent to which institutional support affects individual productivity.

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