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Journal of Educational Management and Learning

Vol. 4, No. 2, 2026



Comparing the Research Visibility of Architecture across ASEAN Universities: Concentration, Turnover and Rank Stability

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Article History

Received 7 September 2026
Revised 5 November 2026
Accepted 13 November 2026
Available Online 21 November 2026

Keywords:
Bibliometric indicators
Higher education management
Longitudinal analysis
SCImago Institutions Rankings
Southeast Asia
Subject rankings

Abstract

Subject rankings increasingly inform how university leaders judge programs, yet their stability across editions is rarely examined. This study examined how much of the change in the research visibility of architecture in the Association of Southeast Asian Nations (ASEAN) reflects universities moving rather than the list lengthening. The 2022 to 2026 Architecture subject lists of the SCImago Institutions Rankings for ASEAN universities (138 entries, 54 universities) were analyzed using country medians of global rank, the Herfindahl-Hirschman index, Cliff's delta with bootstrap intervals, Spearman correlations, and entry and exit counts. Listed universities rose from 11 to 45, and the worst global rank from 257 to 882. Listing became less concentrated (index 0.29 to 0.24), whereas Malaysia held five to eight of the ten regional top places in every edition. Indonesia grew from two to 13 universities, but its median rank worsened from 176 to 560, as new entrants ranked low and its two earliest-listed universities declined. Malaysia ranked better than Indonesia in 2024 (Cliff's delta 0.94) and 2026 (0.72), and better than Thailand in 2026 (0.74); Indonesia did not differ clearly from Thailand or Viet Nam. Correlations between consecutive editions ranged from 0.59 to 0.92. The ten universities present in all five editions improved their median rank from 176 to 121.5, whereas the median of all listed universities worsened from 170 to 369, mainly because of low-ranked new entrants. Positions reflect an unreported composite, not the quality of architectural education. Managers should read subject rankings through persistence, relative position and entrant mix, not single-year rank changes.

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1. Introduction

Universities and education ministries across Asia increasingly refer to global rankings when they set research priorities, allocate resources and communicate quality to students and funders [1–4]; in Thailand, for example, rankings have shaped performance assessments and research reward systems [2]. In Indonesia, the pursuit of world-class status has been driven by institutional and market pressures from stakeholders inside and outside the universities [5] and has shaped funding and tuition policy [6]. Research output in the region has also grown quickly: Malaysia produces the largest volume, Singapore leads in citation impact, and Indonesia shows the fastest growth [7], and

a discipline-level study reports a similar division between volume and impact [8]. Rankings at the level of a subject promise a more actionable signal than overall league tables, because a faculty of architecture can see where its university stands among peers in the same field. In the Association of Southeast Asian Nations (ASEAN), where architecture programs differ widely in age, size and research orientation, such comparisons are tempting, but how well they hold up from one year to the next has not been examined for this discipline and region in the literature reviewed.

Using a rank for management purposes requires that it be informative across editions. Critical work shows that rankings combine indicators into one-dimensional scores that are hard to interpret, and that their methodological choices produce inconsistent placements [9–13]. Uncertainty analyses have also shown that ranks depend strongly on the choice of indicators, weights, and aggregation rules [14], and the choice of bibliographic database alone can reorder universities, especially lower-ranked and non-English-speaking ones [15]. Longitudinal comparisons indicate that the major rankings are broadly stable over time but mainly reflect reputation and research performance [16]. Year-to-year fluctuations can nevertheless be large relative to real change away from the top: in the Times Higher Education and Shanghai rankings, the share of universities changing their 50-place band from one year to the next, including entries and exits, rose from under 10% among the 50 highest-ranked universities to over 60% in the 351-400 band of the Times Higher Education ranking and over 40% in the 151-200 band of the Shanghai ranking [17], and the Times Higher Education ranking has been described as containing too much noise [18]. Ranking positions also depend substantially on bibliometric indicators such as citations, although their weight differs between rankings [19]. These studies examined whole-university rankings published by other providers. Subject-level rankings add further sources of instability, because the mapping of journals to subjects can change institutional positions [20], and changes in the metrics used for subject rankings can reorder institutions within a subject [21]. Less is known about subject-level lists in a regional discipline, where the list is still lengthening, and universities enter and leave it from one edition to the next.

Architecture is a useful case because research, design practice and teaching are closely entangled in the discipline, so readers may be tempted to interpret research-based ranks as statements about education. The discipline has moved toward English-language journal publication over recent decades [22], yet much architectural work still appears in books, regional outlets and design exhibitions, and citation-based indicators for architecture are far lower than for engineering [23], while indexed output remains thin and uneven in some national systems [24]. Studies of rankings in the discipline have mostly examined rankings of professional programs, such as the survey-based DesignIntelligence rankings in the United States, whose data and scoring have been criticized as weak foundations for decisions by schools and students [25], rather than research-based subject lists. Research-based subject lists for architecture have therefore not been examined for concentration, turnover, or rank stability, and this is the gap the present study addresses.

This study uses five annual editions of the Architecture subject lists of the SCImago Institutions Rankings for ASEAN universities to answer three research questions. First, how many ASEAN universities are listed, and how are they distributed across countries? Second, how do countries differ in global rank position? Third, how stable are ranks across editions, and how much of the change in the aggregate picture comes from universities entering and leaving the list rather than from universities moving? The novelty of the study lies in separating rank movement from list turnover, using a fixed cohort of continuously listed universities, a distinction that studies of whole-university rankings have rarely drawn for a single discipline and region. The lists cannot measure the quality of architectural education, and they do not allow research and innovation to be separated, so the reading offered here states plainly what they can and cannot show. The purpose of this research is therefore to give university and faculty leaders in ASEAN an evidence-based way to interpret year-to-year changes in subject-level ranking positions.

2. Materials and Methods

2.1. Data Source

The SCImago Institutions Rankings, a public web platform that ranks research-focused institutions using Scopus and other data sources [26], was used. For the overall ranking, the platform documents a composite of research (50%), innovation (30%), and societal (20%) factors [26]. The lists analyzed here carry the platform label Overall Rank, filtered to the subject area Architecture. The methodology page consulted does not describe how the composite is built within a subject area, so a position in these lists is treated as the outcome of a composite whose components cannot be recovered. In this article, research visibility is used as shorthand for a university's position in these lists, which need not reflect research alone. Because subject areas in Scopus-based rankings follow the classification of journals, the

Architecture list reflects publications in journals assigned to that subject, which need not coincide with the output of architecture departments [20, 23]. The platform states that the indicator window is five years ending two years before the edition year; for the 2024 edition, the window is 2018 to 2022 [26]. Edition years in this article therefore label editions, not the period of the underlying publications. For inclusion, the platform requires at least 100 Scopus-indexed works in the last year of the window [26], but it states no separate threshold for subject areas. The methodology also changed during the period: rank numbering was revised in 2023 and applied retrospectively to earlier editions, indicators were added to the societal factor in 2024, and Media Mentions replaced Altmetrics in 2026 [26]. In the 2026 edition, the platform also flagged 61 universities for high self-citation and self-referencing and noted that they may be removed in later editions [26].

2.2. Dataset

For the editions 2022 to 2026, the Architecture list restricted to the Universities sector and the ASEAN region was downloaded in 2026. Each list reports the rank within the filtered list, the global rank, the institution, the country, and the sector. No scores or indicator values are reported. The five lists contain 138 entries. After removing the asterisk that the platform appends to institutions whose results include those of their sub-institutions [26], which does not change the reported rank, and harmonizing two name variants across editions, they cover 54 distinct universities. Only five countries appear: Indonesia, Malaysia, Singapore, Thailand and Viet Nam; no university from the other ASEAN member states was listed in any edition. The unit of analysis is the university, not the architecture program or department.

2.3. Measures and Analysis

Listed universities were counted by country and edition, and the median global rank was computed for each country, where a lower rank is better. As a simple measure of concentration, each country's share of the regional top ten, defined as a rank of 10 or better within the ASEAN list, was computed. To describe how evenly listed universities were spread across countries, the Herfindahl-Hirschman index (HHI) was also computed as the sum of squared country shares of listed universities, which equals 0.20 when the five countries are equally represented and 1 when one country holds every entry. To compare countries within an edition, Cliff's delta, a rank-based effect size [27, 28], was used. It is defined here as the probability that a randomly chosen university from the first-named country has a better global rank than one from the second-named country, minus the probability of the reverse. Positive values mean the first-named country ranks better, and values range from -1 to 1. Confidence intervals are 95% percentile intervals from 2,000 bootstrap resamples within each group (seed 20261028), and exact two-sided Mann-Whitney U tests are reported as a check, with p-values adjusted across the 16 comparisons by the Holm method [29]. Because the study focuses on the two largest national groups, Malaysia and Indonesia were compared with each other and with Thailand and Viet Nam in every edition in which both countries had at least three listed universities. Singapore, with two or three universities per edition, is described individually.

To assess stability, Spearman's rank correlation of global rank between consecutive editions was computed for universities present in both, together with the median absolute change in the base-10 logarithm of global rank, which expresses change as a factor. This absolute change in log10 rank is referred to as relative rank change, and the absolute difference in global rank as absolute rank change. Signed change in log10 rank between consecutive editions (positive values indicate a worse rank) was also computed for continuing universities, by country. Whether relative and absolute rank change depended on rank was examined with Spearman's correlation between the change and the rank in the earlier edition, pooled over all consecutive-edition pairs. To separate movement from turnover, universities that were new to the list or had left it relative to the previous edition were counted, and the median rank of new and continuing universities was compared. A fixed cohort, the universities present in all five editions, was also followed. Global rank depends on the length of the global list, which is unknown, but the worst global rank among listed ASEAN universities gives a lower bound for it. Countries are therefore compared only within editions, and changes across editions are treated as descriptive.

All analyses were run in Python with pandas, NumPy [30] and SciPy [31]. The lists are complete for the filter used rather than random samples, so intervals and p-values are read descriptively, as indications of how clearly two countries separate within an edition, not as tests of a hypothesis about a wider population. Universities within a country are not independent, and all findings are exploratory.

2.4. Analysis Workflow

The analysis followed five steps that can be repeated from the public platform. (1) For each edition from 2022 to 2026, the Architecture subject list was opened on the SCImago Institutions Rankings website with the sector set

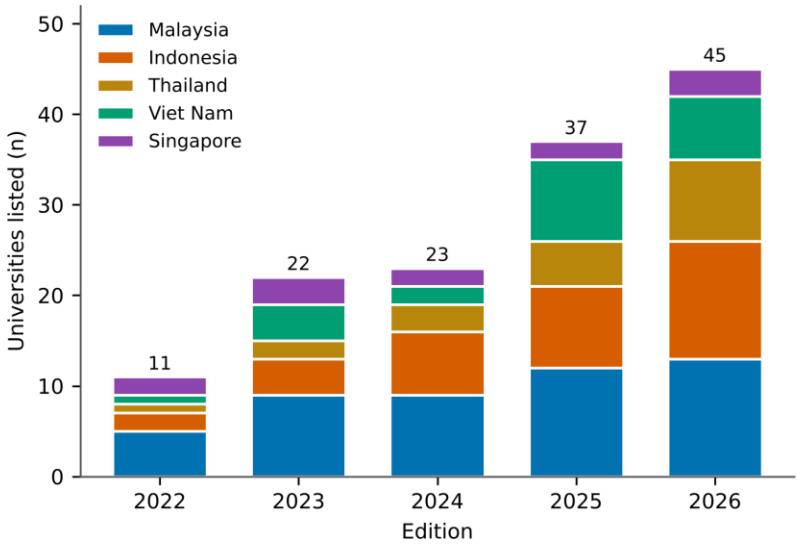

Figure 1. Number of ASEAN universities listed in the Architecture subject list, by country and edition (total above each bar). Source: prepared by the authors from SCImago Institutions Rankings data [26].

Table 1. Number of listed universities and median global rank (in parentheses) by country and edition.

Country	2022	2023	2024	2025	2026
Malaysia	5 (192)	9 (164)	9 (122)	12 (148)	13 (173)
Indonesia	2 (176)	4 (213)	7 (354)	9 (415)	13 (560)
Thailand	1 (257)	2 (303.5)	3 (287)	5 (292)	9 (609)
Viet Nam	1 (141)	4 (210.5)	2 (291)	9 (408)	7 (380)
Singapore	2 (76.5)	3 (154)	2 (187.5)	2 (162.5)	3 (83)
All countries	11 (170)	22 (203)	23 (214)	37 (308)	45 (369)

Note: entries are number of universities (median global rank). Lower rank is better. Medians based on one or two universities are descriptive only.

to Universities and the region set to ASEAN, and the rank within the list, global rank, institution, country, and sector were downloaded. (2) The five lists were stacked into one panel with an edition column; the asterisks marking aggregation of sub-institutions were removed, and two name variants were harmonized, so that each university carried one identifier across editions. (3) For each edition, the number of listed universities, country medians of global rank, country shares of the regional top ten and the HHI were computed. (4) For each country pair and edition meeting the rule in section 2.3, Cliff's delta, its bootstrap interval and the exact Mann-Whitney U test with Holm adjustment were computed. (5) Consecutive editions were matched by university identifier to compute Spearman correlations, changes in log10 rank (absolute and signed, the latter by country), the dependence of rank change on rank, entries, exits and the medians of new, continuing and fixed-cohort universities.

3. Results and Discussion

3.1. Coverage and Country Composition

The number of listed ASEAN universities rose from 11 in 2022 to 45 in 2026 (Figure 1), while the worst global rank among listed universities moved from 257 to 882. Because the worst ASEAN position is only a lower bound for the length of the global list, this shows that the 2026 global list had at least 882 positions, against at least 257 in 2022. The growth in count may therefore reflect a longer global list as well as any change in research activity in the region. Malaysia contributed the most universities in 2022 to 2025 (5, 9, 9 and 12) and tied with Indonesia at 13 in 2026. Indonesia grew from two to 13 listed universities, Thailand from one to nine and Viet Nam from one to seven (nine in 2025), while Singapore stayed at two or three (Table 1). At the same time, listing became less concentrated: the HHI of country shares was 0.29, 0.26, 0.28, 0.24 and 0.24 in the five editions, moving toward the value of 0.20 for five equally represented countries. This pattern agrees with regional bibliometric evidence that Malaysia produces the largest research volume and Indonesia the fastest growth [7]. Singapore, with two or three universities per edition, had the best median rank in 2022, 2023 and 2026 (76.5, 154 and 83), whereas Malaysia had the best median in 2024 and 2025 (122 and 148).

Malaysian universities held 5, 5, 8, 7 and 7 of the ten places in the regional top ten in the five editions, and

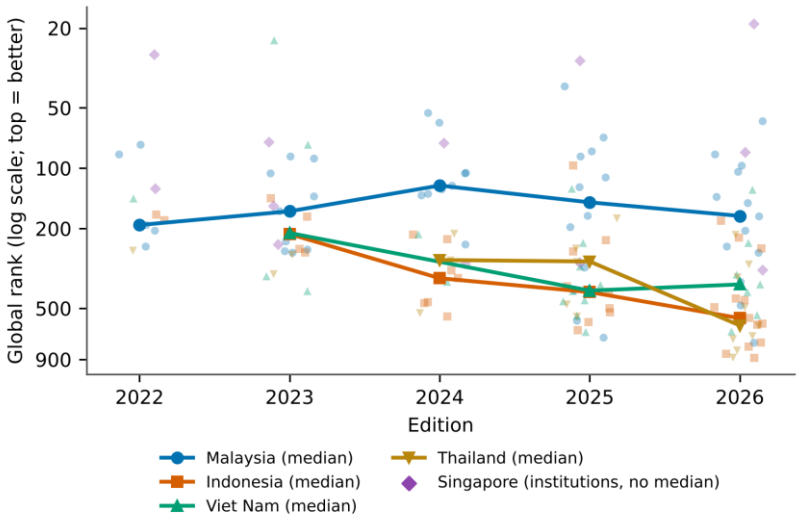

Figure 2. Global rank of each listed university by country and edition. Lines connect country medians (shown for countries with at least three universities in the edition); a lower rank is better, and the vertical axis is logarithmic. Lines join the available medians, so the Viet Nam line passes over 2024, when only two Vietnamese universities were listed. Singapore is shown by individual institutions only, because it had two or three universities per edition. Source: prepared by the authors from SCImago Institutions Rankings data [26].

Table 2. Cliff's delta for differences in global rank between countries within each edition (positive: first-named country ranks better).

Comparison	Edition	n, first	n, second	Cliff's delta	95% bootstrap CI	p (exact)	p (Holm)
Malaysia vs Indonesia	2023	9	4	0.33	-0.33 to 0.89	0.414	1.000
Malaysia vs Indonesia	2024	9	7	0.94	0.71 to 1.00	0.001	0.011
Malaysia vs Indonesia	2025	12	9	0.50	0.04 to 0.89	0.058	0.644
Malaysia vs Indonesia	2026	13	13	0.72	0.40 to 0.96	0.001	0.018
Malaysia vs Thailand	2024	9	3	0.93	0.70 to 1.00	0.018	0.237
Malaysia vs Thailand	2025	12	5	0.43	-0.10 to 0.87	0.195	1.000
Malaysia vs Thailand	2026	13	9	0.74	0.40 to 0.98	0.003	0.036
Malaysia vs Viet Nam	2023	9	4	0.00	-1.00 to 1.00	1.000	1.000
Malaysia vs Viet Nam	2025	12	9	0.52	0.07 to 0.91	0.049	0.589
Malaysia vs Viet Nam	2026	13	7	0.49	0.03 to 0.89	0.081	0.811
Indonesia vs Thailand	2024	7	3	-0.24	-1.00 to 0.71	0.667	1.000
Indonesia vs Thailand	2025	9	5	-0.20	-0.78 to 0.42	0.606	1.000
Indonesia vs Thailand	2026	13	9	0.08	-0.42 to 0.57	0.794	1.000
Indonesia vs Viet Nam	2023	4	4	0.00	-1.00 to 1.00	1.000	1.000
Indonesia vs Viet Nam	2025	9	9	-0.04	-0.60 to 0.51	0.931	1.000
Indonesia vs Viet Nam	2026	13	7	-0.43	-0.87 to 0.08	0.135	1.000

Note: positive delta means the first-named country has the better global rank. p (exact): exact two-sided Mann-Whitney U test; p (Holm): adjusted for the 16 comparisons. Read as exploratory.

Indonesian universities held 2, 1, 0, 1 and 0. Concentration at the top thus moved in the opposite direction to concentration in the list as a whole: Malaysia's share of the regional top ten rose from 50% in 2022 and 2023 to between 70% and 80% from 2024 onward. The best-ranked university was the National University of Singapore in 2022, 2025 and 2026 (global ranks 27, 29 and 19), Ton Duc Thang University of Viet Nam in 2023 (23) and Universiti Teknologi Malaysia in 2024 (53). The median global rank of Malaysia stayed between 122 and 192 in all editions. In contrast, the median for Indonesia worsened from 176 in 2022 to 560 in 2026, for Thailand from 257 to 609 and for Viet Nam from 141 to 380 (Table 1). These medians mix two things: the position of universities that were already listed and the position of those that entered later, and section 3.3 separates them.

3.2. Differences in Rank Position Between Countries

Figure 2 shows the global rank of each listed university and the country medians. Malaysia had a clearly better rank distribution than Indonesia in 2024 (Cliff's delta = 0.94, 95% CI 0.71 to 1.00, unadjusted p = 0.001) and in 2026 (0.72, CI 0.40 to 0.96, unadjusted p = 0.001), and a less certain advantage in 2025 (0.50, CI 0.04 to 0.89, unadjusted p = 0.058). In 2023, the interval was wide and included zero (0.33, CI -0.33 to 0.89), with only four Indonesian universities (Table 2).

Table 3. Turnover and composition of the lists: universities new to the list, continuing universities, departures and the fixed cohort.

Edition	Listed	New to list, n (median rank)	Continuing, n (median rank)	Left since previous edition	Median rank, fixed cohort (n = 10)
2022	11	n/a	n/a	n/a	176
2023	22	11 (254)	11 (164)	0	169
2024	23	5 (472)	18 (174)	4	114
2025	37	16 (458.5)	21 (229)	2	105.5
2026	45	16 (648)	29 (251)	8	121.5

Note: new and continuing are defined relative to the previous edition, so new entries include universities returning after a gap. The fixed cohort is the ten universities present in all five editions.

Malaysia also ranked better than Thailand in 2024 (0.93, CI 0.70 to 1.00, unadjusted p = 0.018) and 2026 (0.74, CI 0.40 to 0.98, unadjusted p = 0.003), while the 2025 interval for Malaysia and Thailand included zero (0.43, CI -0.10 to 0.87). Against Viet Nam, the Malaysian advantage was positive but imprecise: the intervals only just excluded zero (0.52, CI 0.07 to 0.91 in 2025; 0.49, CI 0.03 to 0.89 in 2026), while the unadjusted Mann-Whitney p-values were 0.049 and 0.081. Indonesia did not differ clearly from Thailand or Viet Nam in any edition, since every interval included zero. The direction of the Malaysia and Indonesia difference was the same in all four editions. Still, the size of the gap is not stable, and with groups of 4 to 13 universities, these estimates are imprecise. After Holm adjustment for the 16 comparisons, only the Malaysia and Indonesia differences in 2024 and 2026 (adjusted p = 0.011 and 0.018) and the Malaysia and Thailand difference in 2026 (0.036) remained below 0.05. In four further comparisons (Malaysia against Indonesia in 2025, against Thailand in 2024, and against Viet Nam in 2025 and 2026), the bootstrap interval excluded zero, but the Holm-adjusted p-value did not reach 0.05. Against Viet Nam in 2026, percentile intervals from groups this small are probably too narrow, and these differences are treated as uncertain.

The Indonesian group is largely a group of recent entrants: eleven of the 13 universities listed in 2026 were not in the 2022 list. Six of the 13 were new to the list in 2026 itself, and their ranks ranged from 183 to 882. This is consistent with the literature on the national push for world-class status, which has encouraged more universities to seek ranking visibility [5, 6], and evidence from at least one discipline that higher Indonesian output has not yet translated into comparable citation impact [8]. A gap between countries in this table is therefore partly a statement about how many and which universities have entered the list, which the next section examines.

3.3. Stability, Turnover and Composition of the Lists

Ranks of universities present in consecutive editions were positively correlated, but not uniformly so. Whereas the major whole-university rankings have been found to be broadly stable over time [16], agreement here was only moderate in the first transition, when the list doubled in length. Spearman's correlation was 0.59 between 2022 and 2023 (n = 11 universities), 0.75 between 2023 and 2024 (n = 18), 0.92 between 2024 and 2025 (n = 21), and 0.77 between 2025 and 2026 (n = 29). The median absolute change in log10 rank was 0.16, 0.12, 0.09, and 0.16 in the four transitions, which means that a typical university moved by a factor of about 1.2 to 1.5 in rank from one edition to the next. Individual paths varied widely. The National University of Singapore had global ranks 27, 74, 75, 29 and 19, the University of Indonesia 170, 174, 214, 260 and 222, and Diponegoro University 182, 264, 354, 389 and 494. Ton Duc Thang University moved from 141 to 23 and then left the list, and the State University of Semarang appeared at 97 in 2025 and was absent in 2026.

Presence in the list also changed. Of the universities listed in one edition, 100%, 82%, 91%, and 78% were listed again in the next (Table 3), and ten of the 11 universities listed in 2022 remained in every edition. Across all 54 universities, 20 appeared in only one edition, 12 in two, 4 in three, 8 in four, and 10 in all five, although universities first listed in 2025 or 2026 could appear at most twice. Five universities had gaps; that is, they left the list and returned later (Chiang Mai University, Duy Tan University, Hasanuddin University, the Singapore University of Technology and Design, and Udayana University). Across the four transitions, there were 14 departures from the list and 48 entries that were new relative to the previous edition, including returning universities (Table 3).

Table 3 and Figure 3 show why the aggregate picture and the fixed cohort tell different stories. The median global rank of all listed universities worsened from 170 in 2022 to 369 in 2026. Universities that were new to the list had worse median ranks than continuing ones in every edition (254 against 164 in 2023, 472 against 174 in 2024, 458.5 against 229 in 2025 and 648 against 251 in 2026). In contrast, the ten universities present in all five editions had a median rank that improved from 176 in 2022 to 121.5 in 2026, with a best value of 105.5 in 2025. The

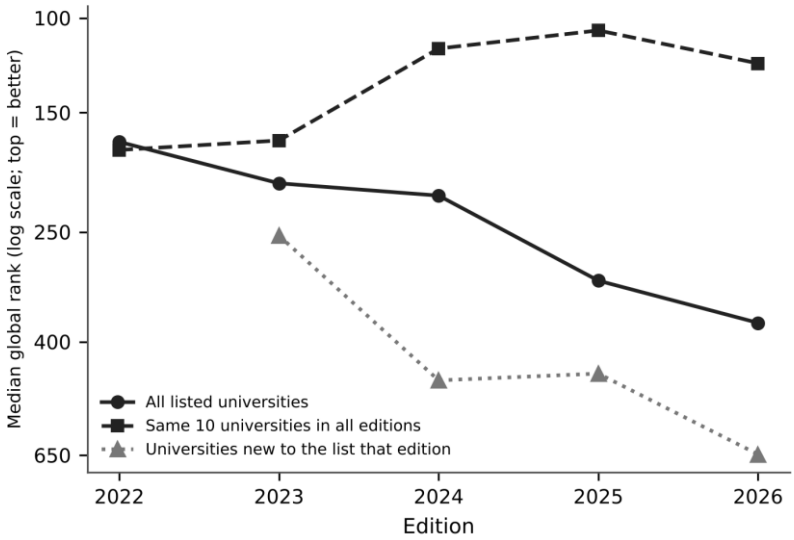

Figure 3. Median global rank of all listed universities, of the same ten universities present in all five editions, and of universities new to the list in each edition (logarithmic axis, inverted so that better ranks appear higher). Source: prepared by the authors from SCImago Institutions Rankings data [26].

deterioration of the aggregate median is therefore consistent with a compositional effect, in which universities entering at low positions pull the median down. Still, it is not the only factor. The continuing group changes composition in every edition, because earlier entrants join it, so its median is not a clean measure of movement. Paired changes are more informative: among continuing universities, the median change in log10 rank in 2025 and 2026 was positive for both Malaysia (0.108 and 0.155) and Indonesia (0.034 and 0.049), that is, a move down the list. Over the period as a whole, the fixed cohort improved, although its median slipped from 105.5 to 121.5 between 2025 and 2026.

The fixed cohort is a survivor group, selected because it stayed in the list throughout, and it consists of five Malaysian, two Indonesian, two Singaporean, and one Thai universities. Its improvement should not be generalized. Within it, the five Malaysian universities had median ranks of 192, 106, 105, 82, and 104 from 2022 to 2026, respectively, whereas the two Indonesian universities (University of Indonesia and Diponegoro University) had medians of 176, 219, 284, 324.5, and 358 over the same editions.Pooled over the 79 consecutive-edition pairs, relative rank change was not larger for lower-ranked universities (Spearman's rho = -0.11, $p = 0.32$), whereas absolute rank change grew with rank (rho = 0.47, $p < 0.001$). Sorz et al. [17] found band changes, including entries and exits, to be far more frequent toward the bottom of whole-university rankings. Their measure is closer to the membership turnover in Table 3 than to the rank changes analyzed here, so the two results are not directly comparable. The pairs are not independent, and the number is small. In addition, a university that fell sharply near the bottom of a list could leave the next edition and thus drop out of the pairs, which would understate relative change at lower ranks. It is therefore only noted that, among continuing universities, relative rank change did not increase toward the bottom of these lists.

3.4. Implications for Higher Education Management

Taken together, the results answer the three research questions. Listing grew fourfold and spread more evenly across countries, while Malaysia kept most of the regional top places (first question). Malaysia ranked better than Indonesia in 2024 and 2026 and than Thailand in 2026 after adjustment, whereas Indonesia, Thailand and Viet Nam were not clearly separated (second question). Ranks were moderately to highly correlated between editions. Still, the worsening of the aggregate median came mainly from universities entering at low positions, while the continuously listed universities improved (third question). An unexpected finding was that the two earliest-listed Indonesian universities declined while the Malaysian members of the fixed cohort improved, so Indonesia's falling median is not only a compositional effect. Separating movement from turnover in this way is the main new contribution of the study, since aggregate medians alone would hide it.

Three implications follow for university and faculty leaders. First, a university's position should be read relative to its own edition and its peers. Movement by a factor of 1.2 to 1.5 from one edition to the next was typical in this period, so a single change of that size is not enough to conclude that performance has changed. Second, entry into the list is a visible event for universities

in Indonesia, Thailand and Viet Nam. Still, it is not a stable achievement: there were 14 departures from the list over the period, and up to 22% of the universities listed in one edition were absent from the next. Persistence across editions is a more informative signal than a single appearance. Third, comparisons between countries should be framed as differences in visibility in one list, since the data contain no information on national funding, program size, or policy that would support causal explanations. Leaders should also keep in view the regional and community roles that lower-ranked and unranked universities state more explicitly than top-ranked ones [4], so that ranking targets do not displace them. This caution is in line with the commitment, made by signatories of the Agreement on Reforming Research Assessment, to avoid using rankings of research organizations in research assessment [32]. Strong pressure to climb rankings has also been linked to gift authorship, publication in predatory journals and other gaming of bibliometric indicators [33], a risk worth keeping in view because the platform flagged universities for high self-citation in its 2026 edition [26].

These lists also contain no information on education. They describe institutions, not programs, and they report no teaching, studio, accreditation, or graduate-outcome measures. Architectural work published in books, regional outlets or design exhibitions is also reported to receive far fewer citations than journal output [23], and built work leaves no citation record, so citation-based indicators capture only part of the discipline's output. A leader who wants to compare architecture education across ASEAN needs program-level evidence of those kinds, and research visibility should enter such a comparison only as one input. Likewise, because the lists carry no indicator values, the research and innovation parts of a position cannot be separated, and statements about innovation in architecture cannot be drawn from them.

3.5. Limitations and Future Research

The main limitations are as follows. The analysis covers five editions and at most 45 universities per edition, which makes country comparisons imprecise. The lists are institution-level and depend on a composite whose components are not reported, and the global list lengthens over time, so ranks are not strictly comparable across editions. The data rest on one bibliographic database, and both database coverage and the assignment of journals to subject areas can change positions [15, 20]. Indicator windows overlap across consecutive editions, which may contribute to the high correlations in some transitions, although this was not tested. Entry to and exit from the lists may partly reflect output thresholds that the platform does not specify for subject areas, rather than changes in visibility alone. The platform renumbered past editions in 2023 and revised its indicators in 2024 and 2026 [26], so part of the movement across editions may reflect methodological change rather than change in institutions. Two name variants were also harmonized by hand. Future work could add earlier editions, compare architecture with other subject areas, use bibliometric records for architecture directly, and combine research visibility with program-level data on education.

4. Conclusions

This study examined whether changes in the research visibility of architecture among ASEAN universities in the SCImago Institutions Rankings reflect universities moving or the list lengthening. On the first research question, the Architecture subject lists grew from 11 to 45 universities between 2022 and 2026, and listing spread more evenly across countries, while Malaysia held the most places in the regional top ten and a growing share of them; Singapore, with two or three universities, had the best median rank in three editions (2022, 2023 and 2026), and Indonesia, Thailand and Viet Nam expanded their presence mainly at lower positions. On the second, Malaysia ranked better than Indonesia in 2024 and 2026, and than Thailand in 2026, whereas Indonesia was not clearly different from Thailand or Viet Nam. On the third, between 78% and 100% of listed universities were listed again in the next edition, and ten of the 11 universities listed in 2022 stayed throughout. The worsening of the median rank of all listed universities is consistent mainly with new entrants at low positions, while the ten universities present throughout improved their median rank. Unexpectedly, the median paired change among continuing Malaysian and Indonesian universities was downward in 2025 and 2026, and the two earliest-listed Indonesian universities ranked worse in 2026 than in 2022, so the decline is not purely compositional. The novelty of the study is that it separates rank movement from list turnover in a regional subject list. Managers should read such rankings through persistence, relative position, and entrant mix. They should not treat them as measures of the quality of architectural education or as separate measures of research and innovation. Future research should combine these lists with program-level data on education, compare architecture with other subject areas and test whether the patterns hold in later editions.

Author Contributions: Conceptualization, Z.Z. and M.D.; methodology, Z.Z. and S.S.; software, S.S.; validation, Z.Z., S.S., M.D. and G.M.I.; formal analysis, Z.Z. and S.S.; investigation, Z.Z. and M.D.; resources, Z.Z. and M.D.; data curation, S.S.; writing—

original draft preparation, Z.Z. and S.S.; writing—review and editing, Z.Z., M.D. and G.M.I.; visualization, S.S.; supervision, M.D. and G.M.I.; project administration, Z.Z.; funding acquisition, Z.Z. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Ethical Clearance: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The five ranking lists analyzed (Architecture, Universities sector, ASEAN region, editions 2022 to 2026) are publicly available from the SCImago Institutions Rankings website. The compiled panel and the analysis code are available from the corresponding author upon reasonable request.

Acknowledgments: The authors used an AI assistant (Claude, Anthropic) for data analysis support and drafting. The authors reviewed the output and take full responsibility for the content.

Conflicts of Interest: Z.Z. (first and corresponding author) and M.D. (third author) are affiliated with Universitas Syiah Kuala (affiliation 1), which is one of the universities in the analyzed dataset and was analyzed in the same way as all other universities. The authors declare no other conflicts of interest.

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