



The Role of Relationship Factor and Institutional Factor on Link and Match Performance in Indonesia's HEI

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Abstract

The purpose of this research is to investigate the impact that institutional elements have on the effectiveness of links and matches by focusing on relationship aspects. PLS-SEM is a type of statistical analysis that is used to check hypotheses. According to the findings of the investigation, the type of mediation that took place was full mediation. According to these findings, higher education institutions (HEI) must not only pay attention to institutional aspects but also pay attention to relationship factors in order to increase link and match performance. This is despite the fact that relationship elements are vital. The aspect of the dispute that requires the most focus from HEI is one that involves fighting. HEI must be capable of keeping disagreements between partners to a minimum, and when they do arise, they must be resolved to everyone's satisfaction. According to the findings of this study, higher education institutions (HEIs) need to develop robust internals, which must be supported by robust partnerships, in order to achieve good link and match performance.

Keywords *link and match performance, institutional factor, relationship factor, HEI*

INTRODUCTION

The competition among educational institutions of higher learning, such as universities, for global renown is intensifying. They compete to be the finest institution where users' expectations for a quality education program are met. As a competitive advantage, a number of superior educational programs were developed, human resource skills were improved, and facilities were constructed. This phenomenon results in the emergence of global survey institutions that assess universities. World University Ranking (QS-WUR), Times Higher Education (THE), Shanghai Jiao Tong Ranking (SJT), and Webometrics are the others. The QS-WUR is one of the most popular models. It is one of the international university rankings endorsed by the International Ranking Expert Group (IREG), and one of the most frequently cited.

Formerly known as Times Higher Education-QS World University Rankings, the QS World University Rankings are an annual publication of university rankings by Quacquarelli Symonds (QS). From 2004 to 2009, the publisher collaborated with Times Higher Education (THE) magazine to publish the ranking results. Beginning in 2010, both parties began releasing their own versions. Universities are ranked using indicators such as the ratio of international students, the ratio of

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international faculty, the ratio of faculty students, citations per faculty, academic reputation, and employer reputation. In 2022, the Massachusetts Institute of Technology (MIT), the University of Oxford, and Stanford University were the best universities globally.

The universities that maintain a position in the top tier are regarded as World-Class Universities. It is generally regarded as the nation's most prestigious research university, and its contribution to its competitiveness in the global knowledge economy is deemed crucial. At the apex of the higher education hierarchy, these universities play a crucial role in creating and disseminating knowledge, cultivating a highly skilled workforce for technological and intellectual leadership, and meeting the requirements of society (Qi Wang et al., 2012).

The issue resides with universities that strive for the top spot. They struggle not only to meet the international indicators, but also to connect the indicators and ensure that they are interconnected and mutually supportive. Link and Match is a well-known concept or model for assuring that everything is interconnected. In the context of the University, this concept ensures that competitive advantage indicators have objectives, functions, and roles that complement one another. Objectives, knowledge transfer, and technology transfer can be used to evaluate the performance of the link-and-match procedure.

According to the case study of Universitas Pendidikan Indonesia (UPI), the linking and matching process is not optimal. This is evidenced by the fact that UPI is only recognized as the finest university in the field of education, where it is not ranked among the TOP QS-WUR universities. Even though UPI has prioritized the infrastructure and non-infrastructure it has constructed. The campaign to make UPI a world-class university with the help of the entire academic community has been echoed. According to the 2020-2024 Ministry of Education and Culture Strategic Plan, which is outlined in the 2020 Ministry of Education and Culture Regulation Number 22 of 2020, the smallest units such as study programs, faculties, and other activity units are encouraged to implement goals that support UPI's status as a World Class University. This disparity necessitates further investigation into whether or not link and match performance is influenced by infrastructure and relationship factors.

There is currently no research to substantiate this. In contrast, previous research has focused solely on establishing a link and match model in vocational and non-formal institutions, as well as with partners and the school education curriculum. Based on this explanation, this paper aims to analyze the influence of institutional factors on link and match performance, through relationship factors.

LITERATURE REVIEW

Link and Match Performance

Link and match is a concept that ensures competitive advantage indicators have objectives, functions, and roles that mutually support one another. In measuring how the link and match process has performed well, it can be measured by objectives, knowledge transfer and technology transfer (Sadlak, & Liu, 2007). Link and match in the context of higher education seeks to ensure that all university elements support the management's strategic objectives.

Institutional Factor

This factor is associated with the internal university. Its dimensions include resources, structure, change readiness, process, and control (Bejinaru & Prelipcean, 2017). In addition, it is known that institutional factors influence relationship factors, such that the greater the institutional factors owned by a university, the greater the impact on the relationship factors constructed by related

parties at the university (Ali, Mardapi, & Koehler, 2020; Kurniawan, Jusuf, & Suryana, 2023).
 H1 : Institutional factor has significant impact to Link and match performance

Relationship Factor

In Link and Match, relationship is defined as one of the most essential factors. This factor is defined as an output deriving from the establishment of effective communication, which can lead to a mutually beneficial exchange transaction. This definition emphasizes the compensation or balance that consumers perceive between benefits and sacrifices in comparison to other providers. Recently, relationship value has been regarded as a central component in the study of inter-organizational relations and has emerged as a crucial factor for the maintenance of long-term cooperation between parties (Tsao et al., 2016). This factor has eleven dimensions: communication, commitment, trust, culture, partner selection, image, expectation, experience, leadership role, acquire expertise, and conflicts.

H2 : Institutional factor has significant impact to Relationship Factor

H3 : Relationship factor has significant impact to Link and match performance

H4 : Institutional Factor has significant impact to Link and match performance, through Relationship factor

METHODOLOGY

Research Method

Institutional Factor (InsFac), Relationship Factor (RelFac), and Link and Match Performance (LMPerf) were the variables analyzed in this study. Institutional Factor is assessed by adopting and adapting several measurements from previous research by Gotangco et al. (2021) and Kurniawan, Jusuf, & Suryana (2023). Relationship Factor is measured by incorporating multiple measurements from Bryde & Leighton (2009), Lewicka (2022), and Tsao et al. (2016). The measurement was modified to accommodate the context of this investigation. In addition, Link and Match Performance was measured by incorporating and adapting several measurements from previous research conducted by Chen et al. (2009), Sadlak, & Liu (2007) and Smulowitz (2015).

Respondents, consisted of lecturers, academic staffs, faculty members, partners (HEIs, government, Industries, and mass media), were given questionnaires to complete out and return. The quantity of respondents meets the minimum sample size requirement for this study. Throughout the month of March 2023, questionnaires were sent to HEIs stakeholders in West Java, Indonesia, in order to collect data. Using PLS-SEM analysis, the hypothesis was examined. PLS-SEM is suitable for models with a weak theoretical foundation and novel indications and does not require model fit testing (Hair et al, 2014). Using version 5.0 of the WarpPLS program, this was accomplished.

FINDING AND DISCUSSION

40% of the participants in this study were male and 60% were female. There are as many as 3% Baby Boomers, 40% members of generation X, 54% members of generation Y, and 3% members of generation Z. In addition, 8% hold a high school diploma, 5% a bachelor's degree, 45% a master's degree, and 42% a doctorate. 4% of respondents came from associations, 4% from the media, 6% from industry, and 86% from HEI. 72% are lecturers, 13% are institutional leaders, 7% are education staff, 6% are operational staff, and 2% are instructors based on their position.

Table 1 displays the factor loading and P-Value of the measurement model evaluation, while Table 2 displays the correlation between latent variables and AVE square roots. Additionally, Table 3 depicts the reliability and collinearity, whereas Table 4 depicts the model fit and quality indicators.

Table 1. Loading & P-Value

Indicator	Loading
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InsFac1	0,872***
InsFac2	0,878***
InsFac3	0,931***
InsFac4	0,932***
InsFac5	0,933***
FrmFac1	0,867***
FrmFac2	0,887***
FrmFac3	0,842***
RelFac1	0,845***
RelFac2	0,865***
RelFac3	0,820***
RelFac4	0,823***
RelFac5	0,708***
RelFac6	0,848***
RelFac7	0,872***
RelFac8	0,892***
RelFac9	0,919***
LMPerf1	0,880***
LMPerf2	0,929***
LMPerf3	0,908***

*** = P Value < 0,001

** = P Value < 0,01

* = P Value < 0,05

The factor loading value for each indicator is greater than 0.70, and the P-value for each indicator is less than 0.05, as shown in Table 1. It can be determined that the convergent validity conditions have been satisfied.

Table 2. Correlation among latent variables with square roots of AVEs

	InsFac	RelFac	LMPerf
InsFac	0,910		
RelFac	0,817	0,846	
LMPerf	0,776	0,885	0,906

Table 2 demonstrates that the square roots of each variable's AVEs value are greater than the other

values (which are not printed in bold). The discriminant validity condition is satisfied based on the square roots of AVEs for each variable.

Table 3. Reliability & Collinearity

	InsFac	RelFac	LMPerf
Composite Reliability	0,960	0,957	0,932
Cronbach's Alpha	0,948	0,949	0,890
Collinearity	4,127	6,123	4,810

Table 3 demonstrates that the composite reliability coefficient and Cronbach's alpha are both greater than 0.7 for each individual variable. It is possible to conclude that the conditions for dependability have been met. As suggested by the table's title, Table 3 also demonstrates that the value of the VIF for each variable is less than 10. According to each variable's VIF value, there are no indications of collinearity.

Based on Table 4, the requirements for the fit model are met. The inner model requirements are satisfied when the suit model requirements are met.

Table 4. Model Fit and Quality Indiches

	Value	Requirement
APC	***	*
ARS	***	*
AARS	***	*
AVIF	3,041	< = 5
AFVIF	4,716	< = 5
GoF	0,758	> = 0,1
SPR	1,000	> = 0,7
RSCR	1,000	> = 0,9
SSR	1,000	> = 0,7
NLBCDR	1,000	> = 0,7

*** = P Value < 0,001

** = P Value < 0,01

* = P Value < 0,05

The t-statistics that were provided by the WarpPLS program are evaluated in order to obtain the following results for a test of the hypothesis:

Table 5. Direct & indirect effect

	Beta	Annotation
InsFac > LMPerf	0,16	Not sig.
InsFac > RelFac	0,83***	Sig.
RelFac > LMPerf	0,76***	Sig.
InsFac > RelFac > LMPerf	0,63***	Sig. (full mediating)
R Square	0,79	High

*** = P Value < 0,001

** = P Value < 0,01

* = P Value < 0,05

Table 5 illustrates the significant connection between the institutional component, the relationship factor, and the link and match performance. In addition, there is a considerable connection between the institutional and relationship factors, and between the relationship factor and the link and match performance. In addition, there is a substantial connection between the institutional factor and the link and match performance through the relationship factor. As a direct consequence of this, Headings H2, H3 and H4 are allowed, however, Headings H1 are not. This model had values of 0.79 for the R-square statistic. These values are compared with standard figures: R-square 0.02 indicates a weak correlation, R-square > 0.15 indicates a moderate correlation, and R-square > 0.35 indicates a significant correlation. There is a high level of reliability in the constructions of predictive determination for link and match performance. The Relationship Factor fully mediates the connection between Institutional Factor and Link and match performance.

The relationship factor functions as a full mediator between institutional factors and link and match performance, according to the above analysis. The results of this study demonstrate the significance of the relationship factor. To achieve excellent links and match performance in tertiary institutions, it is necessary to rely on institutional factors in addition to internal ones. Regardless of how well the resources, institutional structure, innovation, processes, and supervision are implemented, wood relations with partners are required for strong connections and performance parity.

HEI must cultivate strong relationships with their collaborators. Good communication; building trust with partners; committing; being able to adapt to the dynamics that occur; cooperating with potential partners who share the same areas of expertise, vision, and goals; having the support of institutional leaders and partners; and minimizing conflicts that may arise are all indicators of this positive relationship. According to the analysis results, the most important aspect of establishing a healthy relationship is minimizing companion conflicts. In the meantime, if there is a conflict, it must be resolved appropriately.

The results of this paper's analysis of the research model constructed demonstrate that excellent internal conditions and positive relationships with partners are necessary for HEI to establish good link and match performance.

CONCLUSIONS & FURTHER RESEARCH

Relationship factors are critical in bridging institutional factors and link and match performance. This study contributes to existing knowledge by enhancing and broadening our understanding of what universities in Indonesia need to pay attention to improve Link and Match performance. The findings of this study indicate that the relationship factor is an essential variable in improving the Link and Match performance of HEI in Indonesia. Future researchers are expected to be able to develop this research with a broader scope to produce a more robust and general model. In addition, future researchers can add antecedents that influence the Link and Match performance of HEI in Indonesia.

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