Execution Capability and Learning Culture as Mediator of Alignment for Improving Performance in Higher Education Institutions

Nurul Kamilia [1*], Mirwan Surya Perdhana [2] , Suharnomo [3], Abdul Fattah Annur [3]

[1] Department of Economic and Business, Universitas Negeri Semarang, Semarang, Indonesia
[2] Department of Economic and Business, Diponegoro University, Semarang, Indonesia
[3] Department of Economic and Business, Diponegoro University, Semarang, Indonesia
[4] Department of Economic and Business, Universitas Negeri Semarang, Semarang, Indonesia

*E-mail: nkamilia@mail.unnes.ac.id

Abstract. The objective of the article is to explain the role of strategic alignment process, execution capabilities and learning culture to improve the performance a Study Program in University. This study explores the impact of the strategic alignment process for enhancing the Study Progam's performance. Hence, this study also explores the impact of execution capability and learning culture as a mediator on improving the performance of the Study Program. The article is quantitative research. The respondents are the Head of Study Programs at several Prominent Universities in Central Java Province, Indonesia. The sample was chosen by random sampling method with 124 samples. Data analysis used confirmatory factor analysis and structural equation modeling (SEM) AMOS. The research reveals that execution capability and learning culture have a significant effect on the performance of the Study Program as mediating variables. Execution capability and learning culture as a mediator significantly increase the influence of the strategic alignment process on improving performance. The research contributes to existing knowledge in the Higher Education environment by providing antecedents to the strategic alignment process which includes execution capabilities, learning culture, and study program performance as a theoretical implication. Therefore, a study program needs to improve the quality of the execution capability and strengthen learning culture of its organization as recommendation. This research tries to explain the theory regarding the resource-based view and contingency theory. This capability becomes the mediator of alignment to improve performance in term of execution of strategy, likewise with the learning culture. The originality of this research is the use of the Higher Education institution environment as a research object within the framework of adaptation to change and combination of execution and culture to improve the Study Program performance

Keywords: Alignment Process, Execution Capability, Learning Culture, Higher Education

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1. Introduction

Growing competition in the higher education sector causes universities to changes in order to remain competitive in their field of operations (1). The dynamics of campus management processes have been influenced by the forces of globalization and its changes such as the increase in the share of private funding and digitalization, have resulted in increasingly complex factors for universities to succeed in demonstrating the best quality of education and performance (2). As a complex organization that simultaneously forms the largest industrial sector in the world with a different way of operating companies, universities, or higher education institutions are expected to be adaptive to change, in addition to the need for organizational stability (3). Alignment is a need to make an adaption, both in the internal and external environment of the Higher Education Institution, which alignment become a solution for adapting the change (4). As a management function, various different activities in organization are well aligned and interrelated (4–9). Alignment could also support the role of human resources, especially administrative staff, to take action not just as a supporting role to achieve organizational goals, but also to provide support the institutions in administering process in higher education institution effectively and efficiently (10). Several studies prove that alignment has a positive influence on organizational performance, both in business institutions and higher education institutions such as universities. Similar result shows the significant influence of aligning factors that support performance success and information technology on organizational performance in higher education institutions (11). On the other hand, a study to examine alignment in two variables, balanced alignment and strengthening alignment, showed different results, which is relationship between strengthening alignment and the company's competitive performance is not significant (12). Other studies also state that alignment does not have a significant direct influence on performance. Both research in companies and at higher education institutions (12–14). The differences in results from the research above indicate a gap to study. Some approaches that can be used are the concept of strategy execution capabilities and learning culture.

Aligning strategic elements in an organization requires compatibility between strategy and culture within the organization. Because alignment refers to the process of integrating the key factors of a system in response to changes in the external environment, the implementation process requires consistency (15). A learning culture is a support form for achieving organizational performance that allows organizations to remain consistent in developing capabilities in dealing with change (16). When a university or higher education institution adopts the concept of learning in managing change, it will be easier for the university to go through the dynamic processes and a higher education institution could take benefit from applying the learning concept on its management (17). Strategic alignment together with a learning culture plays an important role in achieving organizational performance. Both of them together have a positive influence on organizational dynamics in dealing with change (16). A learning culture within an organization strengthens the organization's ability to introduce and apply knowledge that can be used to adapt to environmental changes. Meanwhile, strategic alignment provides consistency with the directions and actions taken by the organization and aims

to unify the organization's strategy and internal and external functions, including information system technology (18).

As alignment requires compatibility between the strategic path and the cultural path, as well as consistency between the two, strategy execution is a concept that believed could bridge the gap between alignment and performance (19). This is because alignment refers to the process of integrating key factors of a system in response to changes in the external environment (15). Clear and focused direction regarding strategy implementation from the leadership of the organization will form a clear work structure as well. Likewise, clarity and unified understanding regarding organizational goals are very important, remembering that changes and adjustments in actions will always occur in every element in the organization (5). Strategy formulation and strategy implementation or execution are both interdependent and are part of an overall package of organizational planning, implementation and adaptation processes. The success or failure of strategy execution will later influence strategies and plans which change over time (20). Most research of the alignment concept and execution has been conducted in business organizations. The relationship between organizational alignment and the implementation or execution of strategies within university as a sample has not been talked much. Mostly are about aligning success factors in improving the performance of higher education organizations and examines how deep the influence of these factors is on improving organizational performance (11,14,21,22). Although strategy implementation has become an important part of international competition, it is more concentrated in business institutions, while the challenges of implementing strategy in higher education institutions still receive less attention (23).

The differences in result of researches regarding the relationship between alignment and performance, as well as the limited research that discusses strategy execution, learning culture dan alignment as an integrated part to improving performance, indicate that there is a need for further research regarding the relationship between those three concepts, especially in higher education institutions. Based on these circumstances, this research will specifically concern on strategy execution capabilities as a follow-up of alignment and learning culture as initial assumptions in dynamic change management to improve Higher Education Performance. (19,24,25). This research will be carried out about the concept of alignment as a series with strategy implementation capabilities by placing emphasis on the success of strategy execution and its influence on organizational performance. Based on previous research, studies on organizational alignment and strategy execution are still often carried out separately, especially for university research objects. The aim of this research is to examine the effect of alignment process on performance through the strategy execution capability and learning culture as mediation. The strategy execution and learning culture approach will later consider a large series of change management and its dynamics.

2. Literature Review

2.1 Strategic Alignment Process

Alignment is a management function in which different activities in a business or organization are well aligned and interrelated (4,5,7,8,13). By its nature, alignment is difficult to define although easy to recognize because it is a characteristic found in successful organizations. Alignment is usually only considered in relation to aligning an organization's information technology, or between a strategy and its business strategy, even though a broader concept is needed to provide an understanding of alignment, including the relationship between strategy, structure, processes, people and technology. This is because alignment is a very broad concept, involving consistency, suitability, relevance, and similar ideas (26). Regarding the taxonomy of alignment terms, alignment is divided into seven forms, namely strategic alignment, strategic contingency, strategic coalignment, strategic fit, strategic consistency, strategic congruence and strategy alignment (27). The seven shapes are processed and then put into 2 large classes, namely aligned and fit. Meanwhile, alignment divided into 4 main forms of alignment, namely business alignment, operational alignment, intellectual alignment and IT alignment, as well as 2 combined forms of alignment between business alignment and IT alignment in terms of infrastructure availability (28).

Strategic alignment was chosen as a construct in this research because strategic alignment is considered to represent various components of alignment in previous research. The concept of strategic alignment involves the idea of achieving a level of conformity and harmony between various organizational elements that ensures the achievement of the organization's strategic priorities, so that organizations, both private and public, operate in a particular context by consolidating the synergy between strategy, processes, organizational resources, and technological capabilities can achieve the best performance and high competitiveness (29). Another, define strategic alignment as a dynamic process that brings adaptation to environmental changes with their various uncertainties (30). The concept of strategic alignment itself is rooted in contingency theory in management where the basic premise is that the balance between an organization's strategy and its environmental context has a significant influence on performance. Therefore, strategic alignment, even if achieved over a period of time, may not be maintained due to the changes that organizations always face (30). Based on the explanation above, it can be concluded that the alignment concept used in this research is the Strategic Alignment Process which has the definition as a dynamic process that involves compatibility between business strategy, infrastructure, organizational structure and organizational culture which involves integration between functions to achieve results. (27,28,30–32)

2.2 Execution Capability

Strategy execution is one of capability that organization should have to be able to realize its goals through implementing programs or other technical steps (19,25,33). Strategy execution or strategy implementation is an interrelated process and procedure, starting from the exchange of information between managers and employees regarding company challenges, then translated into strategic plans (either explicitly stated or only assumed by top level managers) in the form of specific actions and build consistency between these efforts (34). This process is very likely to be carried out well if there is an element of adaptation as the ability to face change and collaboration as a means of working together effectively (20,35,36). Strategy execution and strategy implementation are an inseparable series (37). Current performance is the result of strategic decisions made months, even years ago. The strategy will be implemented well when a framework is created. When strategy is transferred in terms of execution, the framework can shift to an understanding of how an organization operates and competes in a fragmented and incomplete form. This competition must be translated into action (38). Strategy execution will be successful if it is supported by three main points, namely the readiness of human resources, the accuracy of the chosen strategy, and support from operational activities. Human resources, company structure, and organizational culture will make the strategy implemented well and perfectly. People in the organization must be able to understand that their actions will be connected to the actions of people in other parts to support and execute the strategy. Likewise, organizational culture provides the glue that reflects company norms and ideals which will provide direction for employee behavior, this is called organizational personality (39). From the explanation above, it can be concluded that human resources, organizational structure and culture have a large role in the success of strategy execution.

One studies that tries to define strategy execution as a measurable construct which tries to find a definition of strategy execution from several studies over a period of 30 years and then classifies it based on 2 large groups, namely action and reaction (34). From the results of this research, it was concluded regarding the definition of strategy execution as :

" a process, and related procedures consisting of the activities of 1) informing – and being informed by managers and employees about the company's challenges, 2) translating strategic plans (either explicitly stated or simply assumed by top-level managers) into specific actions and 3) build consistency in the company's efforts to distribute the allocation of its respective resources as an effort to implement decisions by seeking coherent movements to maintain alignment between organizational efforts and strategic intentions in pursuing company goals. "

Henceforth, the definition of strategy execution above will be used in this research and developed into Execution Capability . It is carried out with the consideration that capabilities represent several specific organizational assets that require continued investment to maintain company excellence, created by four foundations, namely strategy, structure, execution and culture (39). This definition is also used as reference by several consideration. First, the study provides a detailed measurement model of the

strategy implementation construct. Second, the research explicitly dismantles the complex phenomenon of strategy execution into two main components, namely actions or "causes" and results or "consequences". Third, the research brings theoretical arguments and empirical evidence about the complex nature of the strategy execution construct (34).

2.3 Learning Culture

The book "Encyclopedia of Management Theory" classifies the concept of learning or learning as part of change management or Change Management (40). Organizational learning also recognized as a situation that occurs when each organizational unit acquires knowledge that its members recognize as potentially beneficial to the organization (41). Another was defined organizational learning as a process of creating, absorbing, maintaining, transferring and applying knowledge between elements in an organization (42). O(43)ganizational learning is providing as a real process of individual thinking that complements the organization, where organizational learning depends on organizational goals, organizational culture and organizational structure (16). Organizational culture here emphasizes a culture of sharing, a culture of relationships between organizational elements, and a culture of developing results. The construction of learning within organizations also shapes understandings of workplace socialization, meaning making, and power relations (17). The development of an organizational learning process that starts from the individual to the organizational level, is usually embedded in the organizational structure as is the case with organizational culture. So, to achieve maximum results in organizational learning is very dependent on the clarity of direction and goals of the organization, a culture of sharing and interconnectedness between organizational subsystems, as well as organizational structure and culture (16).

Various literature reviews have shown that there are various conceptualizations of organizational learning. Rrganizational learning is broadly divided into three areas, namely the level of the learning process, learning orientation, and the relationship with performance (43). The level of the learning process consists of individual, group and organizational levels. For learning orientation, there are two trends, namely cognitive learning and behavior learning. Meanwhile, when viewed from the relationship between learning and performance, it consists of a direct relationship and an indirect relationship (43–46). There is also an organizational learning construct from Huber (1991) (41) which includes knowledge acquisition, information distribution, information interpretation, and organizational memory. Organizational learning has noted mainly consists of three processes: codification, exploration, and exploitation (47). Organizational learning also suggest involves three learning mechanisms: experience accumulation, knowledge articulation, and knowledge codification (48).

Learning culture concept which use for this study is oriented towards clear organizational goals, where there is a culture of sharing knowledge, and a synergistic relationship is established between organizational subsystems, structure and culture to achieve learning outcomes (16). In addition, organizational learning culture is also connected with the concept of alignment in a dynamic organizational context so that the

measurement is more contextual. The process is in the form of forming, absorbing, maintaining, transferring and applying knowledge between elements in an organization. Where individual thoughts complement the organization with organizational goals, organizational culture and organizational structure as a framework (16,42,49). The use of this definition is done to avoid conceptual confusion, because the term organizational learning culture is considered to represent learning as one of the important things in business success and has become an integrated part of all organizational functions (50). This definition is also considered as a dynamic and integrative concept because theoretically its use emphasizes the changing nature of organizations and can unify various levels of analysis such as individuals, groups, companies, etc.

2.4 Performance

Performance is a description of the level of achievement of the implementation of an activity or policy in realizing the goals, objectives, mission and vision of an organization as stated in an organization's strategic plan. The term performance is often used to refer to the achievement or level of success of individuals or groups of individuals. Performance can be known only if the individual or group of individuals has predetermined success criteria. These success criteria are in the form of certain goals or targets to be achieved. Without goals or targets, the performance of a person or organization cannot be known because there are no benchmarks (51). Many criteria or indicators are used by researchers to describe organizational performance. The criteria most often used for companies are growth rates, profits, market share, operational efficiency and opportunities for success (52)

Improving the quality of higher education in all aspects can help build public trust in higher education. Higher education quality assurance is an appropriate system for maintaining and improving sustainable quality for the tertiary institution concerned and is implemented internally (53). One of the determinations of organizational performance criteria at universities based on a study of organizational behavior at two universities in Ontario Canada which divided organizational performance criteria into 3 things. First, it can be seen from the number of publications produced. Second, from the quantity and quality of synergistic activities between the university and its environment. Third, from students who are active in lecture activities. Apart from that, performance assessment is also seen from how long employees stay to work at the university (22). Another determination of university can be measured using the parameters contained in the three main pillars of higher education, namely: (1) Learning and teaching (student satisfaction, end-user satisfaction, drop out rate, employment rate, enrollment rate, and grade point average). (2) Research performance is measured by publications in national and international journals, staff participation in scientific activities, research that generates funds, and research that has an impact on society. 3) Community service is measured by increasing counseling activities for students, increasing community service activities, and participating in curriculum development (22) (54).

Performance measurement will also refer to statutory regulations, namely Minister of Research, Technology and Higher Education Regulation No. 32 of 2016 concerning Accreditation of Study Programs and Higher Education. Accreditation is an assessment

standard for a department or study program that is assessed by the government institution in the field of education, BAN-PT (National Accreditation Board for Higher Education). This accreditation process aims to assess the suitability and quality of performance of a study program or department itself in running its education system. To obtain an accreditation score, a study program must go through a series of steps that have been determined by BAN-PT. Accreditation has quite a big influence on every element of the study program or department. For the study program or department itself, this accreditation has its own selling point. If the accreditation is maximum, then the number of people interested in the department or study program will certainly be large and will have a positive impact on the department itself. Likewise for alumni, accreditation also has a big influence, especially in the recruitment process. The better the accreditation attached, the greater the chance of being accepted for the job application.

Based on the explanation regarding performance in an organization, the next concept development that will function as the final result of this research model is "Study Program Performance" which is a description of the level of achievement of implementing an activity or policy in realizing the goals, objectives, mission and vision of the organization contained in the strategic planning of an organization using measurements from several previous studies in the world of Higher Education as well as quality assurance standards at the Study Program level.

3. Hypothesis Development

The developing hypothesis starts from the concept of alignment, where alignment within the organization in some studies contributes positively to performance, but in several other studies it does not provide a direct relationship to increased performance (16,55,56). This concept will be linked to the concept of execution ability which will be a mediator in improving performance in higher education. One of the initial assumptions was built on previous research which states that strategy execution is a follow up of organizational alignment in dynamic change management (19,24). Strategy execution is a capability that an organization should have and be able to realize its goals through implementing programs or other technical steps (19,25,33).

The following hypothesis was developed to review whether this one will prove both that alignment has a positive influence on performance or vice versa. Hypotheses will be developed based on the research which have no positive correlation between alignment and performance (12–14). Meanwhile, it is also based on research that previously stated a positive correlation between alignment and performance (11,57,58). Inadequate learning processes in an organization will cause the loss of the organization's ability to carry out strategy execution (59). Together with alignment, learning contributes positively to performance, both directly and indirectly, and plays an important role in achieving organizational performance (16,49,55).

H1 : Strategic Alignment Process significantly has a positive effect on Execution Capability

H2 : Strategic Alignment Process significantly has a positive effect on Learning Culture

H3 : Strategic Alignment Process significantly has a positive effect on Study Program Performance

Strategy formulation will ultimately not provide any results for the organization if it cannot be implemented. Several studies have proven that strategy implementation actually provides the most important value to the success of an organization. Success in implementing strategy influence on organization performance and also has a positive effect on improving organizational performance (60). The success of strategy execution is demonstrated by an increase in company profits and an increase in the ability to return capital (61,62). Implementation of strategy with all its adjustments turns out to have a positive influence on organizational performance. There is a combination of styles implementation with a strategic orientation from the organization shows a positive influence of strategy implementation on performance (63).

H4 : Execution Capability significantly has a positive effect on Study Program Performance.

Culture is considered as key to creating the desired organization and the performance to be achieved, especially a learning culture. Learning culture allows individuals to learn from each other and allowing them to create creative ideas and transfer knowledge (64). The concept of learning culture has also been proposed and defined as a collection of norms and values about the functioning of an organization that have a positive impact on organizational performance (65) Organizational learning also strengthens an organization's ability to introduce and apply knowledge that can be used to adapt to environmental changes. Lack of emphasis on the importance of organizational learning will reduce organizational performance which will then eliminate organizational effectiveness and efficiency (49). Previous studies have provided findings which learning culture has a significant positive effect on organizational performance and improving employee performance (66,67).

H5 : Learning Culture has a positive affect on Study Program Performance

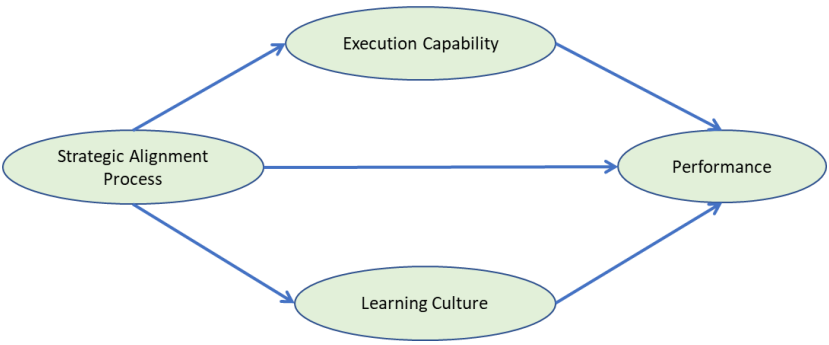

Figure 1. Empirical Model

4. Method

This research uses quantitative methods with Structural Equation Modelling (SEM) analysis tools. The advantage of using SEM is that the data does not have to be normally distributed, it can be used for analysis of variables with reflective or formative indicators, and can be used to analyze relationships between variables with small sample sizes. SEM is also very good for multivariate data analysis in the areas of management and strategy (68).

4.1 Sample and Data Collection

This research collects data using a survey with a structured questionnaire to identify how execution capability and learning culture can be mediator of the strategic alignment process to performance structured in a research model framework. The unit of analysis for this research is study program at universities. Approximately, about 700 study programs will be taken as population from prominent universities both for Private Universities or Government Universities. Central Java was chosen as the research location with the consideration that the distribution of Higher Education facilities in Indonesia is still centralized on Java Island. around 50% of the total Higher Education Institutions in Indonesia (69). To determine the minimum sample size, referenced by analysis tool in this research, Structual Equation Modeling (SEM), which the minimum sample size is 100 as the minimum sample adequacy number for the SEM analysis method. Besides, it is also required that the recommended sample size be at least 5 times the number of variable indicators and 100-200 samples for Maximum Likelihood estimation (70,71). The structured questionnaire used includes a seven-point scale, starting from strongly disagree, represented by the number 1, to strongly agree, represented by the number 7. This research uses an online survey distributed via WhatsApp where respondents fill out the questionnaire on Google Forms as well as an offline survey where respondents fill out a questionnaire containing structured questions. The survey was carried out with assistance from the admission officers of department and Study Program to facilitate distribution of questionnaires and as offline data collection coordinator. The data collection process was carried out from the beginning of March 2022 to the end of May 2022. From around 250 questionnaires distributed, both offline and online, 127 respondents filled in the questionnaire and only 124 respondent be able to analyse.

4.2 Measurement

This research uses high validity and reliability measurement scales for each construct based on previous research. The following table contains the formation of constructs for each variable.

Table 1. Measurement

No	Constructs		Indicator	Reference
1	Strategic Alignment Process	SAP1	The organizational structure is designed according to the needs of the organization to develop and achieve its best performance	(26), (33)
		SAP2	The strategic planning process or work program encourages collaboration with various parties	(26)
		SAP3	Selection and development of strategy and work programs according to stakeholder needs	(16)
2	Execution Capability	EC1	The existence of a state-of-art or master plan for the use of organizational resources, including information technology	(25,72)
		EC2	The work schedule for each activity and work program is clearly arranged and structured	(25,72)
		EC3	The existence of clear and adequate measurement instruments to assess the performance of each activity and work program	(34)
3	Learning Culture	LC1	Organization members understand about their duties and obligations, including the talents needed for their work	(16,55)
		LC2	A team in organization is able to maintain the integrity of its members so that they consistently complete work or tasks	(16)
		LC3	Organizations members always discuss with his team before making a decision	(16)
		LC4	A team always usually has effective conflict resolution when working in groups	(55)
4	Performance	P1	There is an increase in research activities carried out by lecturers and staff	(73), (22), (74) (69)
		P2	There are effective and efficient teaching methods that suit student needs and developments in the business world	(73), (22), (74) (69)
		P3	There is increased collaboration in academic activities with other parties outside campus	(73), (22), (74) (69)
		P4	There is better quality administration service	(73), (22), (74) (69)
		P5	There is an increase in the number of seminars, workshops, etc.	(73), (22), (74) (69)

Table 1 shows the measurement sources used in this study. The questionnaire includes 14 questions that capture construct data in the research model. All items were recorded using a seven-point Likert-type scale. Indicators that used to operationalize

the variables in this research model were adapted from previous research as listed in Table 1 above.

The Strategic Alignment Process consists of 3 indicators measured using several indicators (16,26,33). Execution Capability variable consists of 3 indicators (25,34,72). Learning culture variable consists of 4 indicators which are measured using 4 indicators (16,34,55). Performance variable which consists of 5 indicators. Apart from that, the performance variable measurement also includes several quality assurance measures sourced from the Ministry of Research, Technology and Higher Education or the Ministry of Research, Technology and Higher Education.

4.3 Sample Characteristics

This research uses a survey that collects data from Heads of Study Programs at several prominent Universities in Central Java Province, Indonesia. The survey was carried out using a random sampling method and assisted by administrative staff from each university, both through online and offline surveys. About 250 questionnaires was shared to the Head of the Study Program with a respondent rate of around 50,8 % which came from 127 questionnaires that were returned or filled out. However, this study only used 124 complete questionnaires to continue data analysis after data filtering was carried out.

Table 2. Respondent Demographic

Item	Demographics	Number	Percentage
Gender	Male	81	65 %
	Female	43	35%
Age	< 35	9	7 %
	35 – 45	37	30 %
	– 56	56	45 %
	>56	22	18 %
University Type	State	104	84%
	Private	20	16 %
Length of Work	<5 year	3	2 %
	5 – 10 year	12	10 %
	11 – 15 year	17	14 %
	>15 year	92	74 %
Lengthas a Head of Study Program	< 1 year	14	11 %
	1 – 3 th year	57	46 %
	>3 th year	53	43 %
Number of Staff and Lecturers	< 10 orang	21	17 %
	10 – 20	55	44 %
	>20	48	39 %

5. Results and Analysis

5.1 Data Analysis and Results

This study used a two-step approach including confirmatory factor analysis (CFA) and structural equation modeling (SEM) to analyze the data as recommended by Anderson and Gerbing (75). CFA is used to test measurement models related to the reliability and validity of research constructs. The data obtained from the field was processed using the AMOS program. Before data analysis is carried out, the KMO and Bartlett's Test is carried out which is useful for determining the feasibility of whether a variable can be processed further using this factor analysis technique or not. From the results of the KMO and Bartlett's Test calculations, the results were 0.908 (>0.60), so data analysis from field measurement results can be continued.

5.2 Reliability Test and Validity Test

The reliability of the instrument was tested using Cronbach's α analysis tool. If Cronbach's α coefficient is above 0.70, it indicates a reliable instrument. On the other hand, if the Cronbach's α coefficient is below 0.70, it means that the instrument is not as recommended (76).

Table 3. Validity and Reliability of Constuct

Construct	Indicator	Loading Factor	Error variance	Composite Reliability	Variance Extracted	Discriminant
Strategic Alignment Process	SAP1	0.741	0.451	0.778	0.556	0.746
	SAP2	0.846	0.284			
	SAP3	0.636	0.596			
Execution Capability	EC1	0.811	0.342	0.812	0.593	0.770
	EC2	0.715	0.489			
	EC3	0.782	0.388			
Learning Culture	LC1	0.648	0.580	0.829	0.557	0.746
	LC2	0.785	0.384			
	LC3	0.801	0.358			
	LC4	0.741	0.451			
Performance	P1	0.790	0.376	0.813	0.521	0.722
	P2	0.713	0.492			
	P3	0.697	0.514			
	P4	0.682	0.535			

The data in table 3 shows that the reliability of all variables is >0.7. This means that the measuring instrument used in this research is reliable. Thus, the questionnaire is suitable to be distributed to respondents in this study. Meanwhile, to test the validity of the

instrument, using the composite reliability (CR) value which describes the joint divergence of the observed variables to define the main construct (77). Table 3 shows that CR reaches an adequate level of reliability for each construct between 0.778 and 0.829. Likewise, the Cronbach's alpha value of each construct achieved a level of reliability that could be higher than 0.70 (76). The average variance extracted (AVE) value is between 0.521 and 0.593. Specifically, the AVE of each latent factor must be greater than the squared correlation of that factor with other latent factors. The average variance extracted must be higher than the minimum threshold of 0.5. However, according to Fornell and Larcker (77), even though the AVE is less than 0.5, if the composite reliability is higher than 0.6, then the convergent validity of the construct is still adequate.

5.3 Structural Research Model and Hypothesis Testing

The second step of SEM analysis showed good model fit (71): Chi square (x2) = 82,031; Significance Probability (α) = 0.196, degrees of freedom: 72 and CMIN/DF = 1.139; goodness index (GFI) = 0,915; AGFI = 0.875; IFI = 0.988, Tucker Lewis index (TLI) = 0.984; comparative fit index (CFI) = 0.987; root mean square error of approximation (RMSEA) = 0.034 and standard RMR (SRMR) = 0.030. Meanwhile, validation of the hypothesis shows that the antecedents proposed in this framework are significant for H1, H2, H4 and H5. For H3, the result show that the antecendants proposed is not significant. The research results show that the strategic alignment process has a significant effect on execution capability (H1), Learning Culture (H2) and performance (H3). Execution capability significantly influences Performance (H2), and also Learning Culture significantly influences Performance . Table 4 and Figure 2 show details of hypothesis validation

Table 4. Result of Hypothesis Testing

Hypothesis	Estimate	S.E	C.R.	Result
H1 : Strategic Alignment Process → Execution Capability	0,753	0,164	6,641	Supported
H2 : Strategic Alignment Process → Learning Culture	0,876	0,100	6,304	Supported
H3 : Strategic Alignment Process → Performance	-0,343	0,272	-1,101	Not Supported
H4 : Learning Culture → Performance	0,657	0,333	2,378	Supported
H5 : Execution Capability → Performance	0,553	0,102	3,263	Supported

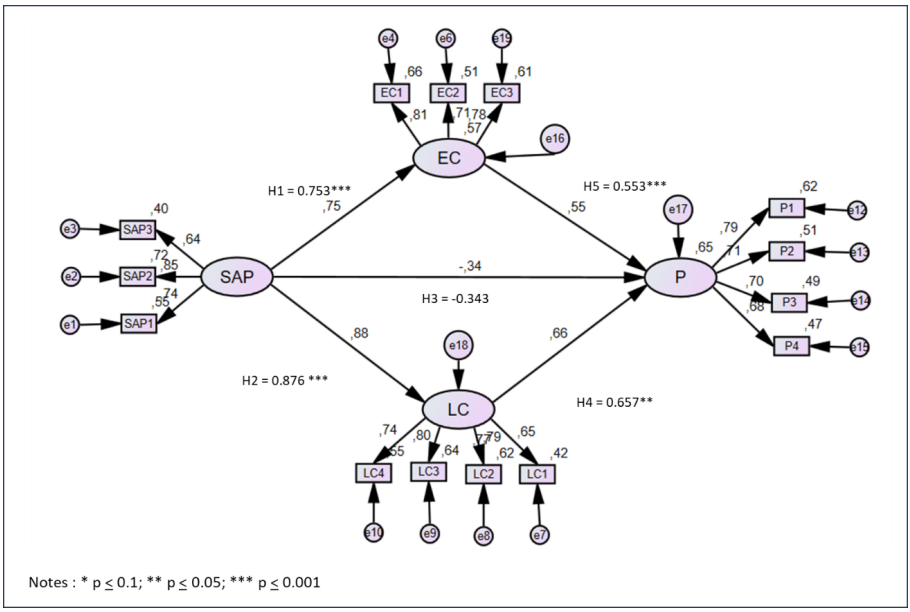

Figure 2. Path Analysis of Structural Mode

This research identifies several antecedents of study program performance in higher education which include strategic alignment processes, execution capabilities and learning culture. Based on Figure 2. regarding the structural model path analysis that has been carried out, it can be seen that the strategic alignment process influences the execution capability a study program in higher education to implement its programs. This is indicated by the estimated value of H1 hypothesis testing of 0.753, which is significant at $p \leq 0.001$. The strategic alignment process also has a significant effect of 0.876 at $p \leq 0.001$ on learning culture. But strategic alignment process has not a significant effect on Study Program performance, which shown by the hypothesis testing of -0,343 at p value $> 0{,}100$. Meanwhile, learning culture has a significant effect to Study Program performance of 0,657 and at p value $< 0{,}05$. It is also shown on hypothesis testing for H5, which execution capability has a significant effect on Study Program performance of 0,553 and at p value $< 0{,}001$.

5.4 Discussion

Based on the results of data analysis, it was found that the strategic alignment process both simultaneously influence execution capability and learning culture. This research

was confirming same result of previous study which stated that execution is an important step or follow-up to alignment (19,25). Likewise execution capability, the more aligned an organization is, the higher level of strategy execution capability been developed (34). Several factors indicates the success of the strategic alignment process in higher education institutions in this research. Those including designed of organizational structure built according to the needs of the organization to develop and achieve its best performance, and selection and development of strategy and work programs according to stakeholder needs (26). In addition, by providing opportunities for study programs to formulate strategies according to their needs and those of stakeholders, it will further facilitate the alignment process in Study Programs (16,28,78). Strongest factor indicates strategic alignment process seen when a Study Program currently in the process of preparing programs or strategies which includes collaboration between various elements.

Consistency in implementing programs or strategies that have been planned is very important, because current performance is the result of strategic decisions taken months, even years ago,. Execution capability is not only about the ability to carry out work programs, but also about maintaining various existing resources in the organization for the sustainability of various activities in the future (25). This statement is in line with this research which factor indicate the level of strategy execution capability could seen in the existence of a state of the art or master plan for the use of organizational resources, including information technology. In the other hand, factors that indicate execution capability of Study Program can also seen from the existence of a well structured work programs and adequate measurements in evaluating the success of implementing the work program. Those factors would build execution capability growing stronger when they were in sufficient condition.

Learning culture as a construct in this research, has been proven significantly influence performance of the Study Program. Based on this research, learning culture also plays a significant role in mediating the strategic alignment process on performance. This is in line with several previous studies which stated that learning has significant influence on performance with its various constructs (17,49,55). The construct of learning in organizations involves an understanding of the socialization process, shared understanding and the strength of relationships. These three components are believed to help an organization developed through learning to achieve the best performance of an organization (17). When organization members understand about their duties and obligations, including the talents needed for their work, it will make learning culture in a study program growing better. On the other hand, if organizations members always discuss with his team before making a decision and a team has an effective conflict resolution when working in groups, according to this research those condition will build learning culture stronger. These in line with the opinion of several experts which real process of individual thinking that complements the organization emphasizes a culture of sharing, a culture of relationships between organizational elements, and a culture of developing results (16,55).

Higher education performance generally measured by several things, such as the condition of graduates, published scientific articles, collaboration with various parties and other indicators that show that the higher education institution carries out teaching,

service and research activities. From this research, it appears that the indicator that contributes most to the performance of the study program is collaboration with the community or community groups. Another factor is the quantity and quality of research conducted or various seminars held (22,73). As well as measurement of performance of Study Program, there are many indicators that show an increase in performance in a study program. Based on this research, increasing the performance of study programs at a university is shown by increasing research activities, teaching methods that are more effective and more in line with students' needs for development, increased collaboration between members of campus organizations who collaborate with other parties, and an increase in the quality of administrative services.

6. Conclusions

The findings show that the strategic alignment process both simultaneously influence execution capability and learning culture. Execution capability and learning culture both simultaneously influence on performance. The results of this research proved that the strategic alignment process could have positive influence on performance if it is mediated by execution capability and learning culture. This result is similar to several previous studies which stated that alignment does not have a positive influence on performance unless mediated by other variables (13,14), although in previous studies, we could find that alignment was proven to have a positive influence on performance. This research also succeeded in confirming previous study which stated that execution is an important step or follow-up to alignment (19) (25). Likewise execution capability, the more aligned an organization is, the higher the level of strategy execution capability that is developed, and the learning culture growing stronger (79). Therefore, considering of strategic alignment process, increasing the ability to execute a strategy and emphasize a strong and deep-rooted learning culture, both simultaneously influence on performance. The results of this research proved that the strategic alignment process could have positive influence on performance if it is mediated by execution capability and learning culture. This result is similar to several previous studies which stated that alignment does not have a positive influence on performance unless mediated by other variables, although in previous studies, we could find that alignment was proven to have a positive influence on performance (13,14). It is very important for higher education institutions, especially at the study program level. It can be concluded that one of the things that makes an organization's performance increase is the organization's ability to execute or implement the strategies and learning culture. Strategy execution as a mediator of alignment and performance give stronger affect on performance. Like wise with learning culture, it also give a stronger affect on performance as mediator of alignment process. The results of this research in the realm of the higher education environment as a case study is very interesting. This is because regarding alignment with both strategy executon and learning culture have not been discussed too much in higher education.

6.1 Theoretical Implication

Theoretically, this research contributes to existing knowledge in the Higher Education environment by providing antecedents to the strategic alignment process which includes strategy execution capabilities and study program performance. The results of this research are expected to contribute to theories regarding change management and contingency theory as a reference theory regarding alignment in organizations. These findings open new insights to fill the gap in previous research regarding alignment where there were inconsistencies in results regarding the influence of alignment and performance, especially in higher education. Mediated by the ability to execute strategies and learning culture, alignment has a positive influence on the performance of study programs in higher education. This finding also contributes to and strengthens the findings in previous research regarding execution capabilities which are a follow-up or follow-up to alignment and learning culture as a power of change. In the end, this research strengthens the role of RBV theory with its execution capability and learning culture in a change management framework to improve the performance of Study Programs in Higher Education.

6.2 Industrial Implication

This research shows that the execution capability and learning culture have a positive influence on improving the performance of the Study Program. Therefore, it is important for a study program to improve the quality of the execution capability and strengthened learning culture that takes place in its organization. In this case, it would be better for study programs to choose and develop strategies that suit stakeholder needs and have a state of the art of resources use. Apart from that, the strategies contained in various work programs in a Study Program must be prepared in line with the Vision, mission and objectives of the Study Program. Meanwhile, in terms of strategy development, the formulation used should give a study program at the university the opportunity to achieve its best performance and allows collaboration with various parties. On the other hand, the ability to execute work programs that have been prepared also plays an important role. Based on this research, execution ability will further increase the opportunity for a study program to improve its performance. In this case, the better the ability of a study program to execute or implement strategies that have been prepared and planned both in the form of work programs and in other forms of activities, the greater the opportunity for the study program to improve its performance, especially in terms of collaboration with other parties outside the University. Meanwhile, regarding the ability to execute programs which are the study program's strategy, the study program can focus on human resource maintenance activities in addition to infrastructure maintenance which will also have an impact on the success of the work program. Apart from that, regular evaluation is also needed for each activity or work program on an ongoing basis. In order to strengthen the learning culture, Study Program members should understand about their duties and obligations, including the talents needed for their work. A team in Study Program expected to able maintaining the integrity of its

members so that they consistently complete tasks. The last things Study Program members should discuss with his team before making a decision so the will have an effective conflict resolution when working in groups

6.3 Limitation and Future Research Agenda

This research has several limitations. First, the respondents of this study only limited on study programs at universities, so the findings cannot be generalized to other Hinger Education Institution model such as academy or diploma degree. Therefore, future research could use various respondents such as study programs from vocational schools or academies. Second, although the execution capability and learning culture were successful in predicting improvements in Study Program performance, this research only explored it from the perspective of the Chair or Study Program Coordinator. Future research could use a broader perspective, such as from lecturers or other educational staff.

7. References

1. Malhan IV. Developing corporate culture in the Indian university libraries. Libr Manag. 2006;
2. Mainardes EW, Alves H, Raposo M. The process of change in university management: From the "Ivory tower" to entrepreneurialism. Transylvanian Rev Adm Sci. 2011;(33):124–49.
3. Sporn B. Towards More Adaptive Universities: Trends of Institutional Reform in Europe. High Educ Eur. 1999;
4. Branson CM. Achieving organisational change through values alignment. J Educ Adm. 2008;46(3):376–95.
5. Dickson DR, Ford RC, Upchurch R. A case study in hotel organizational alignment. Int J Hosp Manag. 2006;25(3):463–77.
6. Joshi MP, Kathuria R, Porth SJ. Alignment of strategic priorities and performance: An integration of operations and strategic management perspectives. J Oper Manag. 2003;21(3):353–69.
7. Kathuria R, Joshi MP, Porth SJ. Organizational alignment and performance: Past, present and future. Manag Decis. 2007;45(3):503–17.
8. Quiros I. Organizational alignment: A model to explain the relationships between organizational relevant variables. Int J Organ Anal. 2009;17(4):285–305.
9. Sender SW. Systematic agreement: A theory of organizational alignment. Hum Resour Dev Q. 1997;8(1):23–40.
10. Sumual H, Soputan GJ. The Implementation of Vocational High School Management Strategy. In 2019.
11. Sabherwal R, Kirs P. The Alignment between Organizational Critical Success Factors and Information Technology Capability in Academic Institutions. Decis Sci. 1994;25(2):301–30.
12. Zhang C, Xue L, Dhaliwal J. Alignments between the depth and breadth of inter-organizational systems deployment and their impact on firm performance. Inf Manag. 2016;53(1):79–90.

13. 1Joshi MP, Kathuria R, Porth SJ. Alignment of strategic priorities and performance: An integration of operations and strategic management perspectives. J Oper Manag. 2003;21(3):353–69.
14. Sumardi S, Fernandes AAR. The mediating effect of service quality and organizational commitment on the effect of management process alignment on higher education performance in Makassar, Indonesia. J Organ Chang Manag. 2018;31(2):410–25.
15. Scherpereel CM. Alignment: The duality of decision problems. Manag Decis. 2006;44(9):1258–76.
16. Hung RYY, Yang B, Lien BYH, McLean GN, Kuo YM. Dynamic capability: Impact of process alignment and organizational learning culture on performance. J World Bus. 2010;45(3):285–94.
17. Dee JR, Leišytė L. Organizational Learning in Higher Education Institutions: Theories, Frameworks, and a Potential Research Agenda. In 2016.
18. Ahriz S, Benmoussa N, El Yamami A, Mansouri K, Qbadou M. An Elaboration of a Strategic Alignment Model of University Information Systems based on SAM Model. Eng Technol Appl Sci Res. 2018;
19. Khadem R. Alignment and follow-up: Steps to strategy execution. Journal of Business Strategy. 2008.
20. Hrebiniak LG. Obstacles to effective strategy implementation. Organ Dyn. 2006;
21. Beckers R, van der Voordt T, Dewulf G. Aligning corporate real estate with the corporate strategies of higher education institutions. Facilities. 2015;33(13–14):775–93.
22. Skarlicki DP, Latham GP. Organizational Citizenship Behaviour and Performance in a University Setting. Can J Adm Sci / Rev Can des Sci l'Administration. 2009;12(3):175–81.
23. Jiang N, Carpenter V. A case study of issues of strategy implementation in internationalization of higher education. Int J Educ Manag. 2013;
24. Harrison T, Bazzy JD. Aligning organizational culture and strategic human resource management. J Manag Dev. 2017;36(10):1260–9.
25. Srivastava AK, Sushil. Alignment: the foundation of effective strategy execution. Int J Product Perform Manag. 2017;66(8):1043–63.
26. Macdonald KH. Organisational Transformation and Alignment: Misalignment as an Impediment to Progressin Organisational Development. Inf Manag Comput Secur. 1994;2(4):16–29.
27. Contador JC, Cardoso W, Contador JL, Spinola M de M. Taxonomy of organizational alignment: implications for data-driven sustainable performance of firms and supply chains. J Enterp Inf Manag. 2020;
28. Gerow JE, Thatcher JB, Grover V. Six types of IT-business strategic alignment: An investigation of the constructs and their measurement. Eur J Inf Syst. 2015;
29. Ghonim MA, Khashaba NM, Al-Najaar HM, Khashan MA. Strategic alignment and its impact on decision effectiveness: a comprehensive model. Int J Emerg Mark. 2020;
30. McAdam R, Miller K, McSorley C. Towards a contingency theory perspective of quality management in enabling strategic alignment. Int J Prod Econ. 2019;
31. Beer M, Voelpel SC, Leibod M, Tekie EB. Strategic management as organizational learning: Developing fit and alignment through a disciplined process. Long Range Plann. 2005;
32. Henderson JC, Venkatraman N. Strategic alignment: leveraging information technology for transforming organizations. IBM Syst J. 1993;
33. O'Regan N, Ghobadian A. The importance of capabilities for strategic direction and performance. Manag Decis. 2004;42(2):292–313.
34. de Oliveira CA, Carneiro J, Esteves F. Conceptualizing and measuring the "strategy execution" construct. J Bus Res. 2019;

35. Blomqvist K, Levy J. Collaboration capability a focal concept in knowledge creation and collaborative innovation in networks. Int J Manag Concepts Philos. 2006;
36. Hrebiniak LG, Joyce WF. Organizational Adaptation: Strategic Choice and Environmental Determinism. Adm Sci Q. 1985;
37. Hrebiniak LG, Joyce WF. Organizational Adaptation: Strategic Choice and Environmental Determinism. Adm Sci Q]. 1985;30(3):336–49. Available from: http://www.jstor.org/stable/2392666%5Cnhttp://www.jstor.org/page/
38. Richardson J. The Business Model : An Integrative Framework for Strategy Execution By September 2005 The Business Model : An Integrative Framework for Strategy Execution. Shidler Coll Bus. 2005;(September):1–27.
39. Joyce WF, Slocum JW. Top management talent, strategic capabilities, and firm performance. Organ Dyn. 2012;41(3):183–93.
40. Kessler EH, Tuckman BW. Encyclopedia of Management Theory: Group Development. SAGE Knowl]. 2013;813–6. Available from: http://www.uk.sagepub.com/gray3e/study/chapter3/Encyclopaedia entries/SWOT_Analysis_Framework.pdf
41. Huber GP. Organizational Learning: The Contributing Processes and the Literatures. Organ Sci. 1991;
42. Bahrami MA, Kiani MM, Montazeralfaraj R, Zadeh HF, Zadeh MM. The Mediating Role of Organizational Learning in the Relationship of Organizational Intelligence and Organizational Agility. Osong Public Heal Res Perspect. 2016;7(3):190–6.
43. Crossan MM, Lane HW, White RE, Djurfeldt L. Organizational Learning: Dimensions For A Theory. Int J Organ Anal. 1995;
44. Argyris C. Teaching Smart People How to Learn. Reflections SoL J. 2002;
45. Cohen WM, Levinthal DA. Absorptive Capacity: A New Perspective on Learning and Innovation. Adm Sci Q]. 1990;35(1):128. Available from: http://www.jstor.org/stable/2393553?origin=crossref
46. Graetz F, Smith ACT. Managing Organizational Change: A Philosophies of Change Approach. J Chang Manag]. 2010;10(2):135–54. Available from: http://www.tandfonline.com/doi/abs/10.1080/14697011003795602
47. Schultz TW. Investment in Human Capital. Am Econ Rev. 1961;51(1):1–17.
48. Zollo M, Winter SG, Zollo M, Winter SG. Deliberate Learning and the Evolution of Dynamic Capabilities. 2002;(May 2014).
49. Hanaysha J. Testing the Effects of Employee Engagement, Work Environment, and Organizational Learning on Organizational Commitment. Procedia - Soc Behav Sci. 2016;
50. Marquardt M. Harnessing the power of action learning. T and D. 2004.
51. Silva FA da, Borsato M. Organizational Performance and Indicators: Trends and Opportunities. Procedia Manuf. 2017;11:1925–32.
52. Timmor Y, Zif J. Change readiness: an alternative conceptualization and an exploratory investigation. EuroMed J Bus]. 2010;5(2):138–65. Available from: http://www.emeraldinsight.com/doi/10.1108/14502191011065482
53. Sukrisno H. Hubungan Antara Responsibilitas Manajemen, Akuntabilitas Mutu Pelayanan, Budaya Mutu, Pembelajaran Organisasi, Kinerja Tim Dengan Keefektifan Sistem Penjaminan Mutu Pada Universitas Swasta Di Surabaya. J Pendidik dan Pembelajaran Univ Negeri Malang. 2010;17(1):23–31.
54. Saldanha EDES. Peran strategi bisnis dalam memediasi hubungan antara persaingan industri dengan kinerja industri. Dissertation. 2018;1–313.
55. Barba Aragón MI, Jiménez Jiménez D, Sanz Valle R. Training and performance: The mediating role of organizational learning. BRQ Bus Res Q. 2014;17(3):161–73.

56. Hanaysha J. Testing the Effects of Employee Engagement, Work Environment, and Organizational Learning on Organizational Commitment. Procedia - Soc Behav Sci]. 2016;229:289–97. Available from: http://linkinghub.elsevier.com/retrieve/pii/S1877042816310746
57. Crotts JC, Ford RC, Heung VCS, Ngai EWT. Organizational alignment and hospitality firm performance. Int J Cult Tour Hosp Res]. 2009;3(1):3–12. Available from: http://www.emeraldinsight.com/doi/10.1108/17506180910940306
58. Sadeghi D. Alignment of organizational change strategies and its relationship with increasing organizations' performance. In: Procedia - Social and Behavioral Sciences. 2011. p. 1099–107.
59. Srivastava AK, Sushil. Modelling drivers of adapt for effective strategy execution. Learn Organ. 2014;21(6):369–91.
60. Njagi L, Kombo H. Effect of Strategy Implementation on Performance of Commercial Banks in Kenya. Eur J Bus Manag. 2014;
61. Zaidi FI, Zawawi EMA, Nordin RM, Ahnuar EM. An empirical analysis of strategy implementation process and performance of construction companies. In: IOP Conference Series: Earth and Environmental Science. 2018.
62. Ibrahim M, Sulaiman M, Al Kahtani A, Abu-Jarad I. The relationship between strategy implementation and performance of manufacturing firms in Indonesia: The role of formality structure as a moderator. World Appl Sci J. 2012;
63. Andrews R, Boyne GA, Law J, Walker RM. Strategy implementation and public service performance. Adm Soc. 2011;
64. Choi I. Moving beyond Mandates: Organizational Learning Culture, Empowerment, and Performance. Int J Public Adm. 2020;
65. Pham LT, Hoang HV. The relationship between organizational learning capability and business performance. J Econ Dev. 2019;
66. Choi I. Moving beyond Mandates: Organizational Learning Culture, Empowerment, and Performance. Int J Public Adm]. 2020;43(8):724–35. Available from: https://doi.org/10.1080/01900692.2019.1645690
67. Paais M, Pattiruhu JR. Effect of Motivation, Leadership, and Organizational Culture on Satisfaction and Employee Performance. J Asian Financ Econ Bus. 2020;7(8):577–88.
68. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt M. Partial least squares structural equation modeling (PLS-SEM)]. Sage Publisher. 2014. p. 1–329. Available from: http://www.emeraldinsight.com/doi/abs/10.1108/EBR-10-2013-0128%5Cnhttp://www.emeraldinsight.com/10.1108/EBR-10-2013-0128
69. Kemenristekdikti. Statistik Pendidikan Tinggi Tahun 2019. Pusdatin Kemenristekdikti. 2019.
70. Ferdinand PDA. Metode Penelitian Manajemen: Pedoman Penelitian untuk Skripsi, Tesis dan Disertasi Ilmu Manajemen. BP Undip 2. 2016.
71. Hair J, Black W, Babin B, Anderson R. Multivariate Data Analysis: A Global Perspective. In: Multivariate Data Analysis: A Global Perspective. 2010.
72. Srivastava AK. Act for Effective Strategy Execution: Mediating Role of Adapt. Glob J Flex Syst Manag. 2014;
73. Alpert D. Performance and Paralysis. J Higher Educ. 1985;56(3):241–81.
74. Tjahjadi B, Soewarno N, Astri E. Does intellectual capital matter in performance management performance relationship ? Experience of higher education institutions in Indonesia. 2019;20(4):533–54.

75. Anderson JC, Gerbing DW. Structural equation modeling in practice: A review and recommended two-step approach. Psychol Bull]. 1988 May;103(3):411–23. Available from: http://doi.apa.org/getdoi.cfm?doi=10.1037/0033-2909.103.3.411
76. Nunnally JC. An Overview of Psychological Measurement. In: Clinical Diagnosis of Mental Disorders]. Boston, MA: Springer US; 1978. p. 97–146. Available from: http://link.springer.com/10.1007/978-1-4684-2490-4_4
77. Fornell C, Larcker DF. Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. J Mark Res]. 1981 Aug 28;18(3):382–8. Available from: http://journals.sagepub.com/doi/10.1177/002224378101800313
78. Higgins JM. The Eight 'S's of successful strategy execution. J Chang Manag. 2005;5(1):3–13.
79. Oliver JJ, Parrett E. Managing future uncertainty: Reevaluating the role of scenario planning. Bus Horiz]. 2018;61(2):339–52. Available from: http://dx.doi.org/10.1016/j.bushor.2017.11.013