The Effect of Strategic Change on Strategic Performance Mediated by Inter-Firm Network and Strategic Alignment

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A R T I C L E I N F O

A B S T R A C T

In facing complex global dynamism, dynamic organizations must be able to overcome real challenges from all aspects to produce superior and competitive performance. This research aims to determine the influence of strategic change on strategic performance mediated by inter-firm networks and strategic alignment. The data collection technique used a questionnaire given to 198 top managers at P-3 professional certification institutions throughout Indonesia. This type of research is quantitative research and data analysis is carried out using Partial Least Square with software SmartPLS 4.0. The results of this research show; 1. strategic change has no direct positive and significant effect on strategic performance, 2. Strategic Change has a positive and significant effect on the Inter-firm Network directly, 3. KInter-firm Network has a positive and significant effect on Strategic Alignment directly, 4. Strategic Alignment has a positive and significant effect on Strategic Performance directly, 5. strategic change has a positive and significant effect on strategic alignment mediated by the Inter-firm Network, 6. Inter-firm Network has a positive and significant effect on strategic Performance mediated by Strategic Alignment, 7. strategic change has a positive and significant effect on strategic performance through inter-firm networks and strategic alignment.

INTRODUCTION

Strategic Performance refers to the successful achievement of an organization's strategic goals (Zou & Cavusgil, 2002). Strategic Performance is also often measured by the success of an organization's achievements in increasing organizational effectiveness, which then includes the organization's strategic performance (Chakravarthy, 1986). Strategic Performance represents the competitiveness of an organization and includes the most influential position among competitors in achieving a foothold in the industry, increasing corporate awareness and responses to competitive challenges created by competitors (Chung et al., 2015).

Inter-firm Network has emerged as an attractive Strategic Performance indicator for Organizations and Companies, because through the network they have better resources and many opportunities. Compared with individual companies, networking provides incentives for companies to work more enthusiastically under unfavorable conditions, and they become relatively more capable of identifying resources and successful integration (Rampersad et al., 2010). Inter-firm Network is a powerful tool to bring prosperity and teach companies to design and bring advanced products to market to achieve Strategic Performance (Dyer & Hatch, 2006).

Strategic Change is seen as an important trend because it acts as a means for companies to sustain competitive shifts and environmental changes, which usually pose threats to their successful performance (Kraatz & Zajac, 2001). Corporate strategy is recognized as having a strong relationship with the company's Strategic Performance because it provides increased competitiveness for the company (Jones, 2003), (Kor & Mahoney, 2005), (Porter & Millar, 1985). Many companies do not learn to continuously change their strategies to suit environmental changes (Vithessonthi & Thoumrungroje, 2011).

Strategic Change is considered as an aid to improving better performance (Hofer & Schendel, 1978), (Kraatz & Zajac, 2001), (Pangarkar, 2015) and can play an important role in changing organizational circumstances (Schendel et al., 1976). However, Strategic Change has also been proven to have a negative impact on organizational performance. For example (Naranjo- Gil et al., 2008) have found a negative impact of Strategic Changes to the operational performance of an organization.

In order to improve the quality and competitiveness of human resources through work competency certification in the global era, strategic policies are needed from the government, in this case the Ministry of Education and Culture and also the National Professional Certification Agency in the form of improving strategic performance and evaluating strategies that have been launched by training institutions, courses, vocational and work competency-based professional certification bodies. Apart from that, we also make efforts to maximize budget allocations. The strategic approach taken in implementing work competency certification in institutions is a stimulus that needs to be carried out by the government. This is done to accelerate the recognition of competency certification for workers so that it can run effectively, proportionally and measurably.

Over the last 5 (five) years, the progress of the BNSP licensing sector shows the very rapid growth in the number of LSPs, as can be seen from the very progressive number of license requests, increasing information services, the increasing number of certified workers and the large number of people who are increasingly aware of competency certification as stated in in the BNSP performance report (BNSP, 2023), however the very fast and massive growth of LSP is not accompanied by massive LSP performance as well. There are still many gaps in LSP strategic performance, monitoring LSP performance through surveillance is still far from being in the good category when compared to the number of LSPs licensed, licensing is also experiencing a slowdown, and suspension or revocation of licenses is still a threat to BNSP's performance in the Quality Assurance sector.

Table 1. LSP performance from 2019-2023

		2019	2020	2021	2022	2023
Surveillance		190	275	356	185	154
Revoke License	Total	-	-	-	22	23
Relicensing		-	-	-	52	-

source: BNSP RI office

The challenges faced by LSP are focused on serving customer needs, not only on customer satisfaction satisfaction) but more value-oriented (customer value). If you want to excel, LSP must be able to respond quickly to customer needs, with the consequence that the organization requires human resources who have expertise and are competent in their field. To realize this, LSP must be oriented towards forming quality human resources that are able to respond to the demands of change (BNSP, 2023).

LITERATURE REVIEW
Strategic Performance

Chung et al., (2015) stated that Strategic Performance improves the learning process and helps companies create unique and competitive capabilities in the operational field. Startegic Performance guides about a business's competitive position, and includes details regarding a company's overall performance: performance relative to competitors and performance relative to other similar businesses in the industry (Madison et al., 2014). We use Strategic Performance here as the key Strategic outcome Alignment via Inter-Firm networks.

Strategic Change

Strategic Change is seen as an important trend because it acts as a means for companies to face highly dynamic competitive forces and environmental changes, which usually pose a threat to the success of the company's strategic performance (Kraatz & Zajac, 2001) and these changes are referred to as environmental dynamism. (Dess & Beard, 1984). Therefore, companies must learn to be strategic Change that is appropriate to the environment in which the

company operates so as to obtain high performance and competitive advantage compared to other competitors (Thoumrungroje, 2015). Corporate strategy is recognized as having a strong relationship with company performance because it provides increased competitiveness for the company (Jones, 2003), (Kor & Mahoney, 2005), (Caves et al., 1980). Many companies do not learn to continuously change their strategies to suit environmental changes (Vithessonthi & Thoumrungroje, 2011).

Inter-firm Network

Inter-Firm Networks have become the key to the performance of many companies in today's dynamic and highly competitive business environment. According to (Chesula & Kilika, 2020) new technology, globalization, new trends and increasing volatility in the business world contribute to the increasing need for network formation in industry. The nature of the relationship between firm and Inter-Firm performance networks have been the subject of research for some time now. However, extant research reveals that there is a lack of consensus regarding this measurement; and its contextual operationalization suggests that despite the huge increase in research on networks, drawing strong conclusions and generalizable results remains a challenge. This is because most of this research focuses on sectors with different conditions and defines networks in different ways.

Strategic Alignment

In this research Strategic Alignment is defined as a vertical relationship within a company to achieve company strategy (Brown & Blackmon, 2005), (Decoene & Bruggeman, 2006), (Kathuria et al., 2007), (Ward et al., 2007). Other terms, such as: appropriate (Bergeron et al., 2004), suitability, consistency, matching, coordination , linkage or consensus(Dess & Priem, 1995), (Joshi et al., 2003), (Rapert et al., 2002) can be used in alignment.Alignment, as defined by (Smith & Reece, 1999) is "The degree to which operations elements matches the business strategies". In addition, alignment also refers to the extent to which senior managers and functional staff understand and agree on the achievement of organizational and functional goals and the extent to which functional staff support the direction of organizational goals (Papke-Shields & Malhotra, 2001). Another definition of alignment is "A shared understanding about strategic priorities" (Rapert et al., 2002). Based on this definition, the author concludes that alignment is the extent to which all members of an organization support each other in realizing organizational goals.
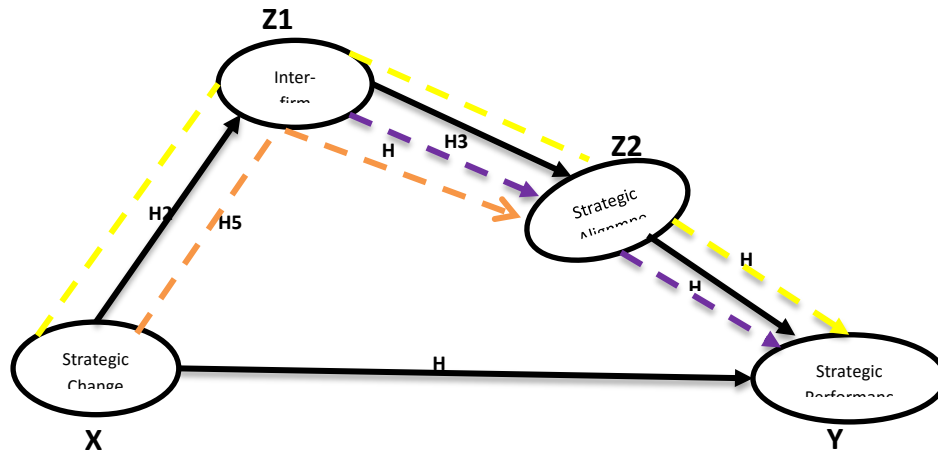
Figure 1. Conceptual Framework

Hypothesis

Strategic Change is considered as an aid to improving better performance (Hofer & Schendel, 1978), (Kraatz & Zajac, 2001), (Pangarkar, 2015) and can play an important role in changing the state of the organization (Hofer, 1980), (Schendel et al ., 1976). Previous research confirms that the entry of an organization into a new product market tests the influence of decision making on Strategic Change (Boeker, 1997). Strategic Change is also referred to as changes in product markets and geographic expansion (Westphal & Fredrickson, 2001); and changes in organizational cognitive reorientation (Gioia & Chittipeddi, 1991). A positive and significant relationship between Strategic Change and Strategic Performance has been established (Bergh & Lim, 2008); (Zúñiga- Vicente & Vicente- Lorente, 2006); (Zúñiga- Vicente & Vicente-Lorente, 2006). Managerial change precedes Strategic Change (Domínguez-Cc & Barroso-Castro, 2017), they also emphasize that restructuring the top-level management team is a sufficient condition for Strategic Change to occur in an organization. Top level managers have an important function in making strategic decisions and making strategic choices a success (Carpenter & Fredrickson, 2001); (Hambrick, 2007); (Hambrick & Mason, 1984); (Hambrick et al., 1993) which can influence the extent to which Strategic Change has been used in an organization.

H1: Strategic Change has a significant positive influence on Strategic Performance

Hardy (2005) provides a view in terms of collaborative relationships across economic sectors, bringing together the private sector, government and non-government organizations to address a variety of complex business and social problems ranging from deregulation, globalization, to sustainable development (Waddock, 1989). This can provide a number of benefits including, helping to encourage innovation by allowing organizations to pool a range of expertise and resources (Trist, 1983) enabling participants to see "different aspects of a problem" so they can "constructively explore their differences". and "seeking solutions that go beyond their vision" (Rico-Gray &

Thien, 1989); and opening "access and agendas to broader participation" by a wider range of stakeholders (Rico-Gray & Thien, 1989).

H2: Strategic Change has a significant positive effect on the Inter-firm Network

Communication and information theory provides a basis for predicting Strategic Performance and can help in developing Strategic Alignment, especially in the manufacturing sector (Guetzkow, 1965; Krone, Jablin, & Putnam, 1987). Information theory considers the importance of the effective relationship of synergistic information potential throughout the organization. These relationships involve horizontal and vertical communication and help in coordinating information between managers who do not know where the information can be used, or the whereabouts of potentially useful information. In particular, achieving strategic alignment requires information to ensure that there is effective coordination between strategy and strategies and between other functions (Wheelwright & Hayes, 1985). The role of Strategic Alignment as a means of formulating and achieving strategic priorities requires an information system that is complementary and covers the entire organization which ensures that all areas are given the right information (Hayes et al., 1988).

H3: Strategic Alignment has a significant positive effect on Strategic Performance

When a company is impacted by a disruptive event, the consequences of the disruption not only impact the company itself, but also impact other partners in the company's network. Thus, disruptive events exceed the capabilities of each actor, thereby impacting the performance of each network. Consequently, network partners must collaboratively make decisions to reduce negative impacts on network performance. In this case, once a disruption occurs, companies must be conscious of activating a series of sustainability and resilience strategies that mitigate the loss of performance. However, a possible approach is collaborative strategic management, so that the chosen strategies are aligned. The proposed strategic alignment approach makes it possible to choose strategies that have a positive impact, or minimum negative impact, on the goals set, not only on the company itself, but also on the goals set by partner companies (Andres & Marcucci, 2020).

H4: Inter-firm Network has a significant positive effect on Strategic Alignment

Relationships between companies and organizations are characterized by mutual dependence (interdependence) on each other due to dynamic and constantly changing environmental situations. Strategic changes have given rise to various thoughts that lead to a business management model based on partnerships, no longer based on competition. For example, several similar thoughts were put forward by (W. C. Kim & Mauborgne, 2014). Kim said that the concept of bloody red ocean competition has become obsolete and replaced with a blue ocean strategy that creates market space without competitors. Another thought was put forward by (Nalebuff & Brandenburger, 1996) with

the concept of coopetition. This concept emphasizes changing the way of thinking (mindset) which combines competition with cooperation in the same marketplace using game theory analysis. Another idea put forward by (Bleeke & Ernst, 1993) is that in the future, there will be an increase in collaboration strategies compared to competition strategies as an effort to welcome cross-border economic and business relations. Collaboration is considered the best concept and tool for negotiating and arbitrating company resources in the form of expertise, access and capital.

H5: Inter-firm Network positive mediates the relationship between Strategic Change and Strategic Alignment

Strategic Alignment is a complex and difficult idea to understand (Chan et al., 2006). This refers to the alignment between the goals and objectives of a company, and the organizational strategy that supports the strategic direction (Venkatraman et al., 1993). The dominant perspective that focuses on alignment between business and the combination of strategic alignment dimensions proposed by previous researchers is; strategy alignment (Chan et al., 2006), planning alignment (Hirschheim & Sabherwal, 2001), and infrastructure or process alignment (Venkatraman et al., 1993). Strategic Alignment can produce greater value for customers through certain product features, for example reduced costs, high quality, and on-time delivery resulting in higher market share and sales (Papke-Shields & Malhotra, 2001). This provides an entry ticket into the company where the company's overall business, technology and products can guide the product development process (Venkatraman et al., 1993). Aligning business strategy with business processes requires time, effort and an experienced management team (Joshi et al., 2003). In addition, appropriate resource allocation can help in reducing costs and increasing Strategic Performance. In this research we hypothesize that Strategic Alignment acts as a mediator between Inter-Firm networks and Strategic Performance.

H6: Strategic Alignment positive mediates the relationship between Inter-firm Network and Strategic Performance

According to (Granovetter, 1973) strategic collaboration is likely to result in the emergence of new ideas, including those related to search, experimentation, risk taking and innovation. New ideas are likely to often emerge from interactions with partners, or alliances, in the same line of business. These different companies will provide access to different knowledge bases. So that interactions with partners can also provide new views in making strategic decisions, which is then called strategic change. Therefore, companies that implement an exploration strategy will often implement an alliance strategy with partners (Granovetter, 1973). Exploration is often characterized by opportunistic behavior and allows companies to bridge two different corporate networks, thereby benefiting from it.

Inter-Firm network refers to a company's relationships with other organizations such as: customers, competitors, suppliers, to improve the performance and strategic success of a company (Venkatraman et al., 1993).

Inter-Firm network refers to the relationships between various individuals/companies (Gulati et al., 2000). (Ritter & Gemünden, 2003a) defines Inter-Firm network as a relationship built for mutual benefit. These activities enable a company to align its goals and strategies to achieve Strategic Performance targets.

H7: Inter-firm Network and Strategic Alignment positively mediate the relationship between Strategic Change and Strategic Performance

METHODOLOGY

This research is quantitative research using a Structural approach Partial Equation Modeling Least Square (SEM-PLS). The population was 888 with samples taken using the Purposive Sampling technique. The total number of samples taken using the Purposive Sampling method was 198 samples (Tarjo et al., 2022). The independent variable in this research is strategic change while the dependent variable is strategic performance with inter-firm mediation variables network and strategic alignment. There are three data collection techniques used, namely questionnaires, observation and literature study with two types of data used, namely primary data and secondary data (Babbie, 2020). All of this research was conducted on top managers at professional certification institutions (LSP-P3) throughout Indonesia

Test data analysis using the Partial Least Square approach which was carried out with SmartPLS 4.0 software (currently the latest version) on the researcher's device. Standardization of data results Referring to the main source (Hair Jr et al., 2021), (Sarstedt et al., 2021). There are two types of measurement models in this analysis test, namely the outer model and the inner model.

RESEARCH RESULT
Outer Model

Outer model test analysis in SmartPLS is an important part of data analysis using the Structural Equation Modeling (SEM) method. The aim of this stage is to verify the validity and reliability of the constructs or variables used in the model (Hair Jr et al., 2021). Some of the things discussed in it are the outer loadings test on convergent validity to test the validity of using loading factors in the SmartPLS software.

Apart from that, the AVE (Average Variance Extracted) and Heterotrait-Monotrait Ratio (HTMT) tests were also carried out in discriminant validity testing. All of this was done using the PLS-Algorithm analysis test on SmartPLS 4.0 with the output graphic results as follows:
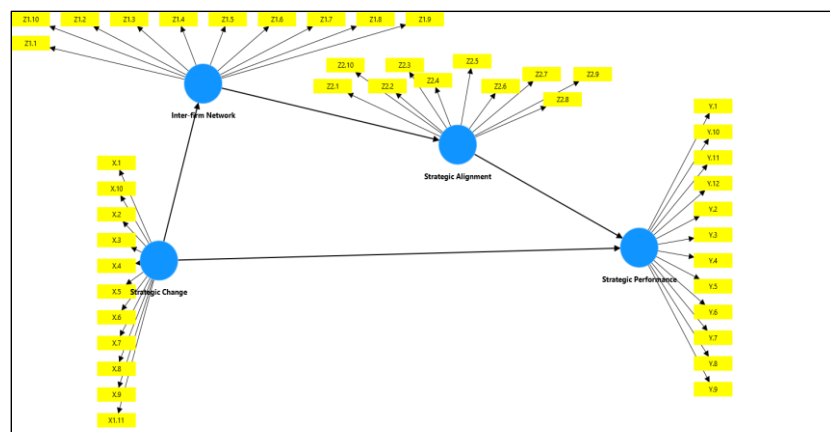
Figure 2: Graphical Output of PLS-Algorithm
Source: SmartPLS 4.0 analyzed at 2024

1. Convergent Validity

In the context of structural models, convergent validity shows that the indicators used to measure a construct are in accordance with the proposed concept and reflect the same dimensions or aspects of construct validity (Sarstedt et al., 2016). In this study, convergent validity was used using the loading factor and AVE methods. A high factor loading value indicates that the indicator significantly contributes to the measurement of the proposed construct (Hair Jr et al., 2021). In most cases, a certain threshold value is considered when determining a significant factor loading value, namely > 0.7 (Vinzi et al., 2010).

Tabel 2. Outer Loadings as Convergent Validity Test Result

	Inter-firm Network	Strategic Alignment	Strategic Change	Strategic Performance
X.1			0,760	
X.10			0,786	
X.2			0,764	
X.3			0,808	
X.4			0,823	
X.5			0,825	
X.6			0,777	
X.7			0,788	
X.8			0,797	
X.9			0,770	
X1.11			0,870	
Y.1				0,804
Y.10				0,714
Y.11				0,877
Y.12				0,915
Y.2				0,783
Y.3				0,826
Y.4				0,739
Y.5				0,856
Y.6				0,812
Y.7				0,936
Y.8				0,818
Y.9				0,685
Z1.1	0,736			
Z1.10	0,889			
Z1.2	0,824			
Z1.3	0,716			
Z1.4	0,886			
Z1.5	0,775			
Z1.6	0,885			
Z1.7	0,867			
Z1.8	0,820			
Z1.9	0,836			
Z2.1		0,810		
Z2.10		0,923		
Z2.2		0,783		
Z2.3		0,819		
Z2.4		0,734		
Z2.5		0,867		
Z2.6		0,822		
Z2.7		0,944		
Z2.8		0,813		
Z2.9		0,890		

Source: SmartPLS 4.0 analyzed at 2024

2. Discriminant Validity

Next are the results of analysis tests on AVE and HTMT to measure discriminant validity. AVE (Average Extracted Variance) measures the ratio of the amount of variance explained by the indicators used to measure the construct to the amount of variance that may be observed in the construct (Hair Jr et al., 2014). The minimum expected AVE value is usually 0.5. A higher AVE value indicates that the construct indicators consistently produce the same results (Vinzi et al., 2010).

Table 3. Average Extracted Variance (AVE) Test Result

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Inter-firm Network	0,947	0,950	0,955	0,682
Strategic Alignment	0,954	0,957	0,961	0,710
Strategic Change	0,943	0,944	0,950	0,636
Strategic Performance	0,954	0,959	0,960	0,667

Source: SmartPLS 4.0 analyzed at 2024

Furthermore, HTMT has the main objective of finding out the extent to which the indicators used to measure various constructs are truly different from each other, so that each construct can be evaluated accurately. The test criteria using the HTMT matrix are <0.90 to be accepted as a requirement for discriminant validity (Henseler, 2017)

Table 4. Heterotrait-Monotrait Ratio Test Result

	onotrait ratio (HTMT)
Strategic Alignment <-> Inter-firm Network	0,858
Strategic Change <-> Inter-firm Network	0,791
Strategic Change <-> Strategic Alignment	0,741
Strategic Performance <-> Inter-firm Network	0,871
Strategic Performance <-> Strategic Alignment	0,837
Strategic Performance <-> Strategic Change	0,737

3. **Reliability Test**

Several methods used in measuring SEM-PLS reliability include using Cronbach's alpha and composite reliability. These methods allow researchers to ensure that the constructs used in the PLS-SEM model are reliable and valid. This is important because the results of the analysis and conclusions generated from the model will only be useful if the construct has sufficient reliability (Sarstedt et al., 2021)

Table 5. Composite Reliability Test Result

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Inter-firm Network	0,947	0,951	0,955
Strategic Alignment	0,954	0,957	0,961
Strategic Change	0,943	0,944	0,950
Strategic Performance	0,954	0,959	0,960

Source: SmartPLS 4.0 analyzed at 2024

Inner Model

Inner model test analysis is an important stage in the model evaluation process. Carried out in Partial Least Squares (PLS) Structural Equation Modeling (SEM), this is used to evaluate the internal or structural construction of the model developed in PLS-SEM. The main focus of internal model test analysis is to evaluate the fit of the internal model, construct validity, and the significance of the relationship between constructs in the model (Sarstedt et al., 2021). As previously mentioned, the inner model test in this study used R-Square analysis, Model Fit, namely Goodness of Fit, F Square or Effect Size, Path Coefficient Direct Effect and Specific Indirect Effect. The model test was obtained through Bootstrapping data using SmartPLS 4.0, especially in answering the previous hypothesis.
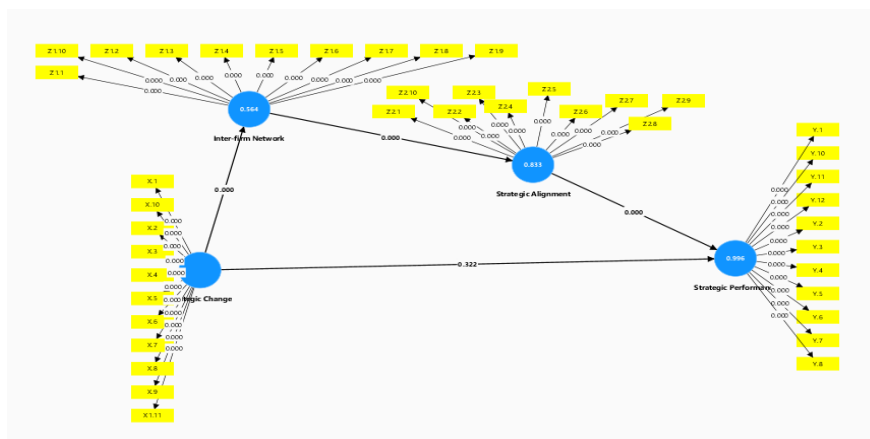

Figure 3: Graphical Output of Bootstraping
Source: SmartPLS 4.0 analyzed at 2024

1. **R-Square**

The Structural Equation with Partial Least Squares (SEM-PLS) model, which uses the R-squared and adjusted R-squared tests, is almost the same as that used in conventional regression analysis, but with some adjustments.

For SEM-PLS, the R-squared value usually ranges between 0 and 1, indicating how well the model can explain the variability caused by exogenous variables, which are independent variables. A higher R-squared value indicates that the exogenous variable effectively explains the variability caused by the endogenous variable. However, to interpret the R-squared value in SEM-PLS, a deeper understanding of the model structure and analysis objectives is required because PLS is a more complex method than linear regression. The R Square value explains the structure of the model and the purpose of the analysis. The R Square value shows how exogenous variables differ from endogenous variables. Several forces can be used to explain this difference. According to the criteria, R Square shows 0.75 as strong, 0.50 as Medium, and 0.25 as weak (Ringle et al., 2015).

Table 6. R-Square Test Result

	R-square	R-square adjusted
Inter-firm Network	0,564	0,562
Strategic Alignment	0,833	0,832
Strategic Performance	0,987	0,987

Source: SmartPLS 4.0 analyzed at 2024

2. Goodness of Fit

The Goodness of Fit (GOF) measure is used in Partial Least Squares Structural Equation Modeling (PLS-SEM) to assess how well the structural model fits the observed empirical data. One way is to use a saturated and estimated model. In path analysis with SmartPLS, the Goodness of Fit (GOF) for a saturated and estimated model shows how well the built model fits the observed data (Sarstedt et al., 2016). To evaluate model fit in SEM-PLS analysis, various metrics can be used, such as SRMR (Standardized Root Mean Square Residual), d_ULS (Unweighted Least Squares discrepancy), d_G (Geodesic discrepancy), Chi-Square, and NFI (Normed Fit Index).

The most recommended metric is to use SRMR. Specification model goodness-of-fit (SRMR) is a measure that measures the difference between empirical and theoretical covariance matrices. A lower SRMR value indicates that there is a better level of agreement between the model and the data. The condition is that if the result is <0.10 then the model is said to be fit or shows good suitability between the model and the data (Ringle et al., 2015).

Table 7. Goodness of Fit Test Result

	Saturated model	Estimated model
SRMR	0,069	0,069

Source: SmartPLS 4.0 analyzed at 2024

3. Effect Size F-Square

The strength of the relationship that occurs between the constructs in the model is measured through the F-Square test, or effect size in the context of the model in smartPLS. This is useful for determining how much influence the independent variable has on the dependent variable in the structural model (Harahap & Tirtayasa, 2020). Meanwhile, the provisions or criteria for the values in the Effect Size test are divided into three groups, namely low/small, medium/moderate and high/strong. The provisions of the test criteria can be seen in the following statement.

- 0.02 shows low/small results
- 0.15 shows medium/moderate results
- 0.35 indicates high/strong results

Table 8. F-Square Test Result

	f-square
Inter-firm Network -> Strategic Alignment	4,982
Strategic Alignment -> Strategic Performance	3,355
Strategic Change -> Inter-firm Network	1,292
Strategic Change -> Strategic Performance	0,001

Source: SmartPLS 4.0 analyzed at 2024

4. Path Coefficient Direct and Specific Indirect Effect

The path coefficient, also known as the path coefficient in direct effects, measures the strength and significance of the direct relationship between the independent variable and the dependent variable in the model. while Specific Indirect Effect refers to how the independent variable has an indirect impact on

the dependent variable through certain mediating variables (Hair Jr et al., 2023). The main provisions are:

- P Values < 0.05 then the effect is significant
- P Values > 0.05 so there is no significant effect
- Sample mean as negatif or positif effect (Kock, 2015)

Table 9. Path Coefficient Direct Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Inter-firm Network -> Strategic Alignment	0,913	0,914	0,017	52,828	0,000
Strategic Alignment -> Strategic Performance	1,002	1,003	0,005	211,572	0,000
Strategic Change -> Inter-firm Network	0,751	0,754	0,041	18,455	0,000
Strategic Change -> Strategic Performance	-0,006	-0,007	0,007	0,991	0,322

Source: SmartPLS 4.0 analyzed at 2024

Table 10. Specifi Indirect effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Inter-firm Network -> Strategic Alignment -> Strategic Performance	0,915	0,917	0,018	50,758	0,000
Strategic Change -> Inter-firm Network -> Strategic Alignment	0,685	0,689	0,041	16,727	0,000
Strategic Change -> Inter-firm Network -> Strategic Alignment -> Strategic Performance	0,687	0,691	0,041	16,780	0,000

Source: SmartPLS 4.0 analyzed at 2024

DISCUSSION

Convergent Validity

Based on the table above, the results show that the three variables (Strategic Change, Strategic Alignment and Inter-firm Network) are all indicators that are said to be valid because the factor loading value is > 0.70. Meanwhile, in the Strategic Performance variable there is 1 indicator which is declared invalid because the factor loading value is <0.70 in the statement code SP9 (Y9). This shows that one of the indicators cannot be used as a measuring tool. Then the indicator will be removed or deleted to be able to proceed to the next stage.

Discriminant Validity

Based on the previous AVE test results, it can be seen that all variables have a value of more than 0.5. The Strategic Alignment variable, which has a value of 0.710, has the highest value, while the Strategic Change variable, which has a value of 0.636, receives the lowest value. The remaining values are mediating variables, namely the Inter-firm Network variable with a value of 0.682, and the Strategic Performance variable with a value of 0.667. This shows that the requirements for the convergent validity test of the AVE method for each variable item have been fulfilled.

Based on the data in table 4 above, the HTMT matrix test results using SmartPLS 4.0 for all variables are less than 0.09. This shows that all variable items in this study have met the threshold for discriminant validity.

Reliability Test

Based on table 5 above, it is clear that each variable item has a minimum Cronbach's alpha score of more than 0.7. The Strategic Performance and Strategic Alignment variable items both received the highest score of 0.954,

while the Strategic Change variable received the lowest score of 0.943. The Inter-firm Network variable scored 0.947. This shows that the model used can be used.

Based on table 5 above, it can be seen that all variable items have a composite reliability value of more than 0.7 for each variable item. On CR_rho_a the highest value was obtained at 0.959 on the Strategic Performance variable item on CR_rho_c the highest value was obtained on the Strategic Alignment item at 0.961.

However, the difference in scores for each variable item is not large because the lowest result for rho_a is 0.944 while for rho_c the lowest is 0.950. This shows that the reliability of the construct in the model is acceptable because it meets the specified minimum score limit, namely more than 0.7.

R-Square

Based on the data results above, it can be seen that the test results on the Inter-firm Network variable item have a value of 0.564 on the R-Square and the same as a value of 0.562 on the adjusted R-Square. This means it has a value above 0.50 so it can be concluded that it has a moderate model. In contrast, the Strategic Alignment variable has a weak model because the resulting value is 0.833 on the R-Square and 0.832 on the Adjusted R-Square. Meanwhile, the Strategic Performance variable item results have the highest value, namely 0.987 in R-Square and 0.987 also in Adjusted R-Squared. This means it has a value above 0.75 so it can be concluded that it has a strong model.

Goodness of Fit

Based on the results of the model fit analysis above, the results of the Standardized Root Mean Square Residual or SRMR in the model are estimated at 0.069 or less than 0.10. This shows that the model estimation results are fit or there is a good match between the model and the data.

F-Square

Based on the data results in table 8 above, it can be seen that the results of the relationship between the Inter-firm Network variable construct and Strategic Alignment are worth 4.982, which means this shows a large or strong result because it is above 0.35. If interpreted in more detail, it shows that the proposed model significantly explains the relationship between the constructs studied and provides a substantial contribution. Furthermore, the construct of the relationship between the Strategic Alignment variable and Strategic performance has a medium result of 3.355, or meets the criteria for a strong/high model. The interpretation of these results also shows that the proposed model interpretively has an effective model in explaining the relationship between the constructs of the two variables, namely Strategic Alignment to Strategic Performance. The construct of the relationship between the Inter-firm Network variable and Strategic performance received the highest score.

In the construct of the relationship between the strategic change variable and the Inter-firm Network, it has a very high result, namely 1.292, which means it is in the strong criteria. The interpretation of the results also shows

that the proposed model significantly explains the relationship between the studied constructs very strongly. The construction of the Strategic Change variable on the Strategic Performance variable has the lowest final value, with a value of 0.001, which is in the low or small category. This construct has the same interpretation as the construct mentioned previously which is interpreted in the same way, namely that the effectiveness of the model in explaining the relationship between the constructs of the two variables.

Path Coefficient Direct and Specific Indirect Effect

Based on table 9, we can see that the P-value of the four direct variables above has a significant and non-significant relationship. The Inter-firm Network variable on Strategic Alignment has a P-Value of 0.000, less than 0.05, which means it has a significant and positive relationship with the original sample value of 0.913. The Strategic Alignment variable on Strategic Performance has a P-value of 0.000 and the original sample value is 1.002, meaning that the relationship between these variables has a significant positive.effect.

The relationship variable between Strategic Change and the Inter-firm Network has a P-value of 0.000 with an original sample value of 0.751, meaning the same as the provisions above, if the P-value is smaller than 0.05, it means that the variable relationship has a significant and positive effect because of the original sample value. positive. Another thing is the Strategic Change variable on Strategic Change which has a P-value of 0.322, more than 0.05, meaning that the variable in question has no significant and negative effect with an original sample value of -0.006.

Based on the results of the indirect effect test above, we can see that the P-value of the three analytical tests above are all below 0.05, namely with a P-value of 0.000. This proves that the Inter-firm Network variable and the Strategic Alignment variable are able to mediate the variables X (Strategic change) and Y (Strategic Performance).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of data processing findings and the discussion above, it can be concluded that:

1. Strategic change has no direct significant effect on strategic performance with an original sample value of -0.006 (negative) and a P-value of 0.322 (>0.05). This shows that the strategic change variable does not directly influence strategic performance, but there must be other mediating variables. This means that the decision to make strategic changes must be based on other things so that the strategic changes have a significant impact on strategic performance.

2. Strategic change has a significant effect on the inter-firm network. The statistical test results show a significant and positive influence, with a P-value of the relationship of 0.000 or less than 0.05 and an (O) value of 0.751. This shows that the decision to make strategic changes in an organization has an impact on the decision to establish cooperative relationships or strategic collaboration with other parties or related stakeholders.

3. Inter-firm network has a significant positive effect on strategic alignment, which can be seen from the original sample (O) value of the inter-firm network relationship and strategic alignment of 0.913, which shows that the inter-firm network variable has a positive influence on strategic alignment directly, shown by the results of statistical data tests via the direct effect coefficient with a P-value of 0.000 below 0.05. This shows that the inter-firm network has a positive influence on strategic alignment. This means that every collaboration decision must take into account strategic alignment between organizations.

4. The strategic alignment variable has a significant positive effect on strategic performance. The original sample value (O) is 1.002, which means that the strategic alignment variable has a positive effect on strategic performance. Meanwhile, the result of the P-value is 0.000 (<0.05). This shows that strategic alignment influences strategic performance positive and significant.

5. The strategic change variable has a significant effect on strategic alignment mediated by the inter-firm network. It has an original sample (O) value of 0.685 and a sample mean of 0.989, which means the strategic change variable has a positive influence on the strategic alignment variable mediated by the inter-firm networks. Meanwhile the results of P Values are 0.000 (<0.05). This shows that the strategic change variable has a significant positive influence on strategic alignment which is mediated by the inter-firm network variable.

6. Inter-firm network has a significant positive effect on strategic performance through strategic alignment. The P-value of this relationship is 0.000 or equal to <0.05, which means there is a significant and positive effect. The positive coefficient between the inter-firm network relationship on strategic performance through strategic alignment shows that the positive influence of the inter-firm network on strategic performance can be explained through strategic alignment. The direction of this positive influence can be seen from the original sample (O) value of 0.915.

7. Strategic change on strategic performance mediated by inter-firm network and strategic alignment has an original sample (O) value of 0.687 and a sample mean of 0.691, which means the strategic change variable has a positive influence on the strategic performance variable mediated by inter-firm networks and strategic alignment. Meanwhile the results of P Values are 0.000 (<0.05). This shows that the strategic change variable has a significant positive influence on strategic performance which is mediated by the inter-firm network and strategic alignment variables. This means that the managerial decisions made by top managers in organizational strategic change to obtain effective strategic performance are to establish strategic collaborative relationships with organizations that have similar values and strategies, both short-term and long-term strategic similarities.

ADVANCED RESEARCH

Further studies to examine the mediating effect of organizational learning and the moderating role of environmental dynamism on the relationship between Stargeic change and Strategic performance. It is understood that much progress needs to be made to examine the issues of strategic change and corporate strategic performance and how organizational learning and environmental dynamism can strengthen or weaken the impact of strategic change on corporate strategic performance. Future research could examine a broader range of corporate environments. In addition, further research should reexamine the insignificant moderating role of environmental dynamism. Finally, future research should conduct longitudinal studies, especially to ascertain variation.

ACKNOWLEDGMENT

REFERENCES

Babbie, E. R. (2020). The practice of social research. Cengage AU.

Bergeron, F., Raymond, L., & Rivard, S. (2004). Ideal patterns of strategic alignment and business performance. Information & Management, 41(8), 1003–1020.

BNSP. (2023). jejak pasti mengawal sertifikasi profesi. BNSP.

Brown, S., & Blackmon, K. (2005). Aligning manufacturing strategy and business- level competitive strategy in new competitive environments: the case for strategic resonance. Journal of Management Studies, 42(4), 793–815.

Caves, R. E., Porter, M. E., & Spence, M. (1980). Competition in the open economy: A model applied to Canada (Issue 150). Harvard University Press.

Chakravarthy, B. S. (1986). Measuring strategic performance. Strategic Management Journal, 7(5), 437–458.

Chesula, M. W., & Kilika, J. (2020). Strategic information technology and performance of telecommunication firms in Kenya. International Journal of Scientific & Research Publications, 10(12), 183–212.

Chung, H. F. L., Yang, Z., & Huang, P.-H. (2015). How does organizational learning matter in strategic business performance? The contingency role of guanxi networking. Journal of Business Research, 68(6), 1216–1224.

Decoene, V., & Bruggeman, W. (2006). Strategic alignment and middle- level managers' motivation in a balanced scorecard setting. International Journal of Operations & Production Management, 26(4), 429–448.

Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. Administrative Science Quarterly, 52–73.

Dess, G. G., & Priem, R. L. (1995). Consensus- performance research: theoretical and empirical extensions. Journal of Management Studies, 32(4), 401–417.

Dyer, J. H., & Hatch, N. W. (2006). Relation- specific capabilities and barriers to knowledge transfers: creating advantage through network relationships. Strategic Management Journal, 27(8), 701–719.

Hair Jr, J. F., Hair, J., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2023). Advanced issues in partial least squares structural equation modeling. saGe publications.

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer Nature.

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. European Business Review, 26(2), 106–121.

Harahap, S. F., & Tirtayasa, S. (2020). Pengaruh Motivasi, Disiplin, Dan Kepuasan Kerja Terhadap Kinerja Karyawan Di PT. Angkasa Pura II (Persero) Kantor Cabang Kualanamu. Maneggio: Jurnal Ilmiah Magister Manajemen, 3(1), 120–135.

Henseler, J. (2017). Partial least squares path modeling. Advanced Methods for Modeling Markets, 361–381.

Hofer, C. W., & Schendel, D. (1978). Strategy formulation: Analytical concepts.

(No Title).

Jones, N. (2003). Competing after radical technological change: The significance of product line management strategy. Strategic Management Journal, 24(13), 1265–1287.

Joshi, M. P., Kathuria, R., & Porth, S. J. (2003). Alignment of strategic priorities and performance: an integration of operations and strategic management perspectives. Journal of Operations Management, 21(3), 353–369.

Kathuria, R., Joshi, M. P., & Porth, S. J. (2007). Organizational alignment and performance: past, present and future. Management Decision, 45(3), 503–517.

Kor, Y. Y., & Mahoney, J. T. (2005). How dynamics, management, and governance of resource deployments influence firm- level performance. Strategic Management Journal, 26(5), 489–496.

Kraatz, M. S., & Zajac, E. J. (2001). How organizational resources affect strategic change and performance in turbulent environments: Theory and evidence. Organization Science, 12(5), 632–657.

Madison, K., Runyan, R. C., & Swinney, J. L. (2014). Strategic posture and performance: Revealing differences between family and nonfamily firms. Journal of Family Business Strategy, 5(3), 239–251.

Naranjo- Gil, D., Hartmann, F., & Maas, V. S. (2008). Top management team heterogeneity, strategic change and operational performance. British Journal of Management, 19(3), 222–234.

Pangarkar, N. (2015). Performance implications of strategic changes: An integrative framework. Business Horizons, 58(3), 295–304.

Papke-Shields, K. E., & Malhotra, M. K. (2001). Assessing the impact of the manufacturing executive's role on business performance through strategic alignment. Journal of Operations Management, 19(1), 5–22.

Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. Harvard Business Review Reprint Service.

Rampersad, G., Quester, P., & Troshani, I. (2010). Managing innovation networks: Exploratory evidence from ICT, biotechnology and nanotechnology networks. Industrial Marketing Management, 39(5), 793–805.

Rapert, M. I., Velliquette, A., & Garretson, J. A. (2002). The strategic implementation process: evoking strategic consensus through communication. Journal of Business Research, 55(4), 301–310.

Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. Boenningstedt.

Sarstedt, M., Hair, J. F., Ringle, C. M., Thiele, K. O., & Gudergan, S. P. (2016). Estimation issues with PLS and CBSEM: Where the bias lies! Journal of Business Research, 69(10), 3998–4010.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In Handbook of market research (pp. 587–632). Springer.

Schendel, D., Patton, G. R., & Riggs, J. (1976). Corporate turnaround strategies: A study of profit decline and recovery. Journal of General Management, 3(3), 3–11.

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. European Journal of Marketing, 53(11), 2322–2347.

Smith, T. M., & Reece, J. S. (1999). The relationship of strategy, fit, productivity, and business performance in a services setting. Journal of Operations Management, 17(2), 145–161.

Tarjo, T., Burhanuddin, B., & Zulkifli, Z. (2022). PENGARUH GAYA KEPEMIMPINAN DAN MOTIVASI KERJA TERHADAP KEPUASAN KERJA KARYAWAN. Jurnal Administrasi Sosial Dan Humaniora, 6(1), 32–43.

Thoumrungroje, A. (2015). The moderating roles of organizational learning and strategic flexibility on marketing strategic change and business performance: evidence from firms in Thailand. In International marketing in the fast changing world (Vol. 26, pp. 179–198). Emerald Group Publishing Limited.

Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). Handbook of partial least squares (Vol. 201, Issue 0). Springer.

Vithessonthi, C., & Thoumrungroje, A. (2011). Strategic change and firm performance: the moderating effect of organisational learning. Journal of Asia Business Studies, 5(2), 194–210.

Ward, P. T., McCreery, J. K., & Anand, G. (2007). Business strategies and manufacturing decisions: an empirical examination of linkages. International Journal of Operations & Production Management, 27(9), 951–973.

Zou, S., & Cavusgil, S. T. (2002). The GMS: A broad conceptualization of global marketing strategy and its effect on firm performance. Journal of Marketing, 66(4), 40–56.