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## Supply Chain Strategy and Human Resource Competency: The Foundation of Manufacturing Company's Excellent Performance

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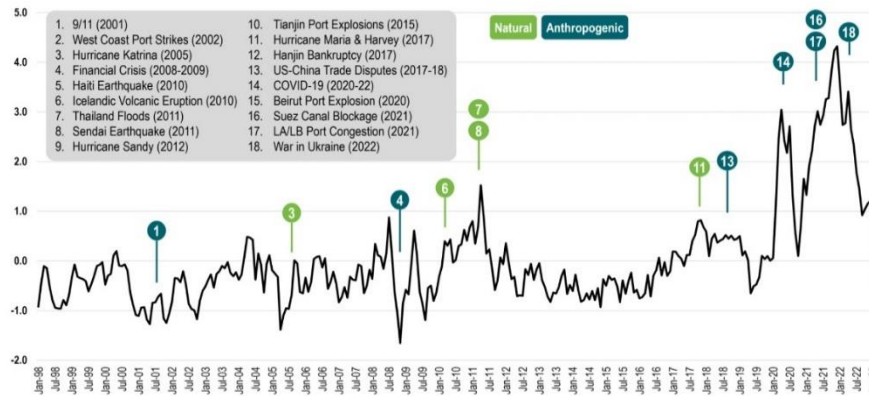
**Abstract:** In Indonesia, the development of the manufacturing industry is considered rapid due to the swift logistics process from producers to consumers. This is related to how and when a product is delivered, making it equally important as the product itself. The progress of the manufacturing industry in Indonesia is also influenced by the advancement of technology, which continuously improves and evolves the Supply Chain process. This research is conducted with the aim of analyzing Supply Chain strategies and human resource competencies as antecedents to the competitive advantage of manufacturing companies. The research was conducted using a quantitative method approach and involved 4 variable constructs consisting of Supply Chain Strategy, Human Resource Competencies, Competitive Advantage, and Company Performance. These five variable constructs are measured with 42 valid and reliable measurable indicators using a questionnaire and a Likert scale of 1-5. The questionnaire was distributed to manufacturing company managers in the DKI Jakarta Province from November to December 2023, using stratified sampling techniques with a total sample of 323 respondents. The data was processed using SEMPLS software. The results of 7 hypothesis tests depict that there is a positive and significant influence of Supply Chain Strategy on company performance; Supply Chain Strategy, Human Resource Competencies, and Competitive Advantage, as well as Human Resource Competencies on Competitive Advantage; Supply Chain Strategy, Supply Chain Strategy, and Human Resource Competencies significantly influence company performance through Competitive Advantage. It is concluded that both directly and indirectly there is a significant influence of Supply Chain strategy and human resource competencies as antecedents to the competitive advantage of manufacturing companies.

**Keywords:** Supply Chain Strategy, Human Resource Competencies, Competitive Advantage, Company Performance.

### INTRODUCTION

Today's dynamic and highly competitive competition encourages companies to be able to understand and respond to the needs of their existing markets and customers (Bindi et al,

2021). In addition, they also have to discover and adapt to emerging markets and the changing needs of their customers (Ariadi et al , 2021; Qi et al , 2017). To realize this they not only have to exploit existing products and or services and their current competencies, but also exploit new ideas or processes and develop new products and/or services (Alpkan, Mehmet & Yuksel, 2012; Sabara et al , 2019 ).



Source: Transportgeography-org, 2023.

**Figure 1 Global Supply chain Pressure Index and Major Disruptions in the Supply chain**

Supply chain strategy as supply chain performance is one of the competitive strategic substances to encourage organizational productivity and profitability (Barnes & Liao, 2012; Shabbir & Kassim, 2018). Nowadays supply chain management, analysis and development have become important. However, there are still gaps that need to be filled to improve supply chain performance, especially in manufacturing sector companies based in Indonesia (Saudi et al , 2019). Most managers in manufacturing organizations primarily focus on supply chain performance, because it plays an important role in holistic management of company costs and profitability (Asnordin & Shereen, 2020 ).

Company and market performance is largely driven by Supply chain performance is largely driven by Supply chain performance (Adams et al , 2014). The study of Supply chain performance can be classified into two main areas. The first research category is about how to measure supply chain performance (Sundram et al, 2017; Mkumbo et al , 2019). The second group of studies focuses on several determinants or predictors that can be used to explain why some supply chains perform better than others (Rajagopal et al , 2016; Selvaraju et al , 2019). Despite the large amount of research on supply chains, there is only a little empirical research on the influence of human resource competency practices on supply chain performance (Hendiani, Liao & Jabbour, 2020).

Human resource competencies and supply chain strategy as fields of study have traditionally been treated separately, although they are closely related in almost all business environments (Barnes & Liao, 2012). Jang & Ardichvili (2020), proposed the importance of competent human resources as they relate to operational areas as a new research theme. To ensure the success of a supply chain strategy, companies need to be fully committed to promoting this human dimension (Asnordin, Veera & Shereen, 2020).

Because currently, there are many manufacturing sector companies in Indonesia that are focusing on improving and investing in technology and infrastructure, but need to dedicate the same attention to the people who manage and operate the Supply chain. Competent human resources are a key element in implementing supply chain strategies (Ou et al , 2010).

Human resource competencies today as a unique approach to workforce management that aims to achieve competitive advantage through the strategic advancement of dedicated and competent workers through an integrated set of cultural, structural and human resource

techniques (Barnes & Liao, 2012; Selvaraju, Beleya & Sundram, 2017). Increasing effective human resource competencies in an organization will enable employees to contribute effectively and beneficially to the achievement of organizational goals and objectives (Hua et al., 2020). This is what makes employees committed to their work and produces positive behavior that will increase the effectiveness of organizational performance (Asnordin, Veera & Shereen, 2020).

The study of human resource competencies has become important in the literature over the last few years (Sundram, Atikah & Chandran, 2016) and most importantly their impact on organizational performance, effectiveness, and employee commitment. However, there is still little literature that describes the relationship between human resource competencies and supply chain strategy (Kinnie, 2014; Harari, Jain & Joseph, 2014; Asnordin, Veera & Shereen, 2020). This omission is due to the previously noted emphasis of early research on the difficult topic of Supply chain. Furthermore, there is a lack of studies that evaluate the determinants and their alignment with Supply chain strategy. Anastasiou (2012), said that HR competencies must be applied proactively to developing supply chain strategies.

Considering the logistics business environment is full of uncertainty, capability, and competitiveness are very important for the health of the organization (Smirnova et al., 2011). When an organization's market orientation produces value for customers that is step-by-step and difficult to imitate and can be a source of sustainable competitive advantage that will enable companies to outperform their less market-oriented competitors (Liao et al., 2011; Altuntas, Fatih & Hanife, 2013). Highly market-oriented companies have the ability to provide important information to companies to help them become more competitive in the market (Zamani et al., 2017; Kirca et al., 2005)

It is based on market orientation in a company leading to a better understanding of customer needs and enabling it to develop products and services that are superior to those of competitors (Hult & Ketcher, 2001). Companies that adopt strong market orientation capabilities are more sensitive and proactive in responding to customer demands, seizing market opportunities and quickly producing products and services according to customer preferences (Sampaio et al., 2019). Dynamic capabilities become the micro foundation of a company's capabilities, facilitating the allocation of company resources, optimal operational and management processes (Helfat & Peteraf, 2015; Wilden & Gudergan, 2015) which leads to sustainable competitive advantage (Teece, 2014).

Market orientation capabilities are very important for the success of a supply chain strategy, high market uncertainty as observed so far, has made companies realize the importance of understanding the market and responding with appropriate supply chain strategies (Handfield, 2010; Pettit et al., 2019). Companies with an effective supply chain strategy can better coordinate supply chain processes, making it possible to build new networks of suppliers, distributors and customers (Espino-Rodriguez & Taha, 2022).

The first novelty raised in this research is that researchers include HR competency variables in the research framework because there are still very few previous researchers who have raised HR management studies into the issue of supply chain management strategy. Researchers also enrich studies related to the performance of manufacturing sector companies by including the topics of supply chain strategy and market orientation in their analysis, where these two variables are closely related to developing and building competitive advantage.

Based on previous research gaps conducted by Ali, Liu & Siraj (2023), the results of their research measured the impact of supply chain strategy on performance in only one type of sub-sector of the electronics manufacturing and supporting industry in China. Research by Beigi, Esmail & Safari (2023) where in the results of the research data collection was based more on cross-section data in the midst of declining economic growth conditions which directly impacted the competitive advantage of industries in Tehran. The research results of

Kalaitzi & Naoum (2022) where in their research they analyzed the impact of supply chain adoption on competitive advantage and company performance in the manufacturing industrial sector in the UK.

### METHOD

The research stages in this research start from the pre-research survey, namely the process of observing, seeing and hearing all phenomena in the field; reviewing literature studies related to the use of relevant theories related to determining grand theory, middle theory and variable theory and continuing to review the results of previous research

Referring to data from the Indonesian Manufacturing Industry Directory for 2022, it is known that the number of manufacturing companies in Indonesia, both medium and large scale, has reached around 29,000 businesses or companies (BPS, 2023). The medium and large industrial scale is determined based on several criteria including the number of workers, the amount of accumulated investment value, the amount of turnover obtained by the company and specifically in the rice milling industry using machine scale (BPS, 2022).

This technique is used to obtain a representative sample by looking at the stratified population of manufacturing companies, namely spread across six regions kotain the DKI Jakarta province which are heterogeneous (not similar). So, researchers took samples that represented each of kotathem. Then, the next step is to determine the number of samples using the Slovin method with the following formulation:

$$n = \frac{N}{1 + \{N \times (e)^2\}} \text{ (Sugiyono, 2019)}$$

Information:

n : Number of samples required

N : The number of existing populations

e : Percentage of allowance for inaccuracy, due to sampling error that can still be tolerated or desired, namely 5%.

So the calculation or determination of sample size in this research is as follows.

$$n = \frac{1.683}{1 + \{1.683 \times (5\%)^2\}}$$
$$n = \frac{1.683}{1 + (1.683 \times 0,0025)}$$
$$n = \frac{1.683}{5,2075}$$

$$n = 323,1877 = 323 \text{ samples}$$

The N value is 323.1877 and then rounded to 323. Thus, referring to the calculation above, the sample that must be in this research is 323 respondents from medium to large companies that have implemented a Supply Chain Strategy. Furthermore, the sample size in each region can be calculated and is presented below.

**Table 1 Research Sample**

Region Population	Number of Manufacturing Companies	Percentage (%)	Amount Sample
Thousand Islands	1	0.001	1
JakartaSouth	118	0.070	23
JakartaEast	365	0.217	70
JakartaCenter	118	0.070	23
JakartaWest	638	0.379	121
JakartaNorth	443	0.263	85
Total	1,683	100%	323

The basis for using the sample size determined in this research is 323 companies. This refers to Hair's opinion which states that the appropriate sample size is between 100-500 (Cooper & Hair, 2013), while for testing research instruments a sample of 323 respondents was used. This is based on Hair's recommendation which states that the appropriate sample size is between 100-150, to guarantee a stable maximum likelihood estimation solution even though 50 samples can still provide valid results.

The data sources in this research consist of primary data and secondary data. Primary data was obtained directly from the field using a questionnaire instrument. Researchers used a questionnaire instrument which contained statements regarding the research variables asked of the respondents. The data scale used is a Likert scale, namely an interval scale consisting of interval values of strongly agree (5), agree (4), quite agree (3), disagree (2), and strongly disagree (1). Apart from that, in this research the researcher also used secondary data obtained from reports published by the Ministry of Transportation, company data, books, research journals, both journals published nationally and internationally and articles, scientific knowledge that is relevant to the topic discussed in this research.

In this research, data analysis uses the Partial Least Square (PLS) approach. Apart from being used to confirm theories, PLS can be used to explain whether there is a relationship between latent variables. PLS can simultaneously analyze constructs formed with reflective and formative dimensions.

In this research, SEM-PLS software, namely SmartPLS 3, will be used to analyze the data. PLS allows researchers to estimate complex causal models with latent variables (graphically represented as circles) and observed variables (graphically represented as rectangles). Latent variables can be manifested as unobserved phenomena such as perceptions, attitudes, and intentions, while observed variables are manifested as responses to questionnaires.

In this research, PLS (Partial Least Square) is used, for the first reason, PLS (Partial Least Square) is a method that uses samples that do not have to be large, that is, the number of samples can be under 100, making analysis easier. The stages of PLS analysis using SmartPLS 3 include 3 stages, namely:

### **Measurement Model Testing Phase**

1. loading factor indicator must be  $> 0.7$  => smartpls algorithm output
2. AVE reflective construct  $> 0.5$  => smartpls algorithm output
3. AVE square root must be  $>$  correlation => smartpls algorithm output
4. Crombach's alpha  $> 0.7$ , composite reliability  $> 0.7$  => output smartpls algorithm

### **Goodness Of Fit Model Testing Phase**

1. Q2 predictive relevance => predictive power of the model => output smartpls blindfolding
2. Model Fit => feasible model and data to test the influence of variables => SRMR must be  $< 0.10$  => smartpls algorithm output

### **Structural Model Testing Phase**

1. significance test => significant effect if p value  $< 0.05$  and T value  $> 1.96$  => smartpls bootstrapping output
2. partial effect size =>  $f^2$  => smartpls algorithm output
3. large simultaneous effect =>  $R^2$  => smartpls algorithm output. Each stage of analysis will produce 3 smartpls outputs which you can download in the form of an excel file. The smartpls algorithm output is used to test the outer model, the smartpls blindfolding output

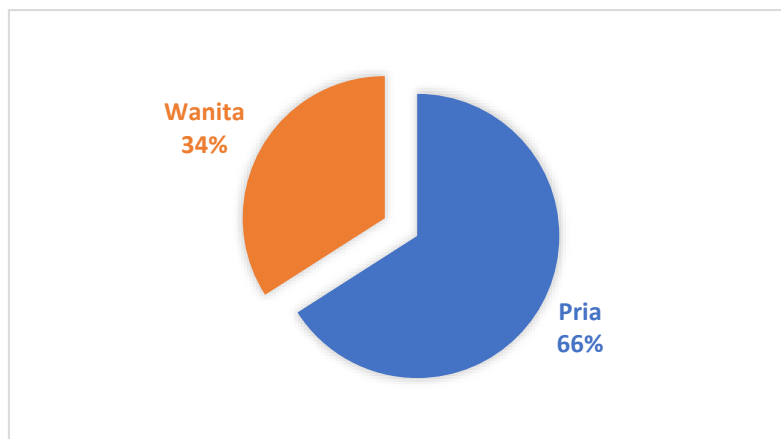
is used to test the goodness of fit model and the smartpls bootstrapping output is used to test the inner model

## RESULTS AND DISCUSSION

### Data Description

#### Characteristics of Respondents Based on Gender

Gender in general can make a difference in a person's behavior. In a field of work, gender can often be a differentiator in the activities carried out by individuals. The presentation of primary data of respondents based on gender that was obtained is as follows:



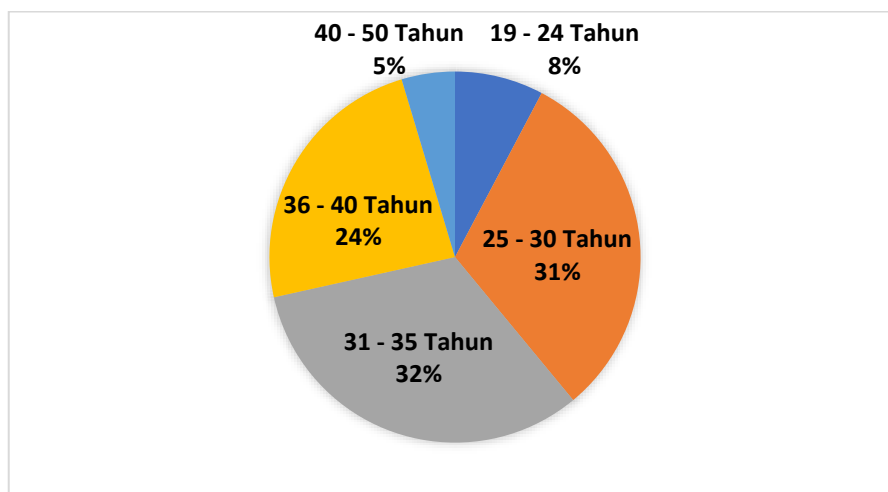
Source: Primary Data Processing Results, 2024

**Figure 2 Gender**

From Figure 2 above, it shows that of the 323 respondents, the majority were male, namely 213 people or 66% and the rest were female respondents, namely 110 people or 34%. More male respondents than female respondents work in manufacturing companies related to logistics.

#### Characteristics of Respondents Based on Age

The presentation of respondent data based on age that has been collected is as follows:



Source: Primary Data Processing Results, 2024

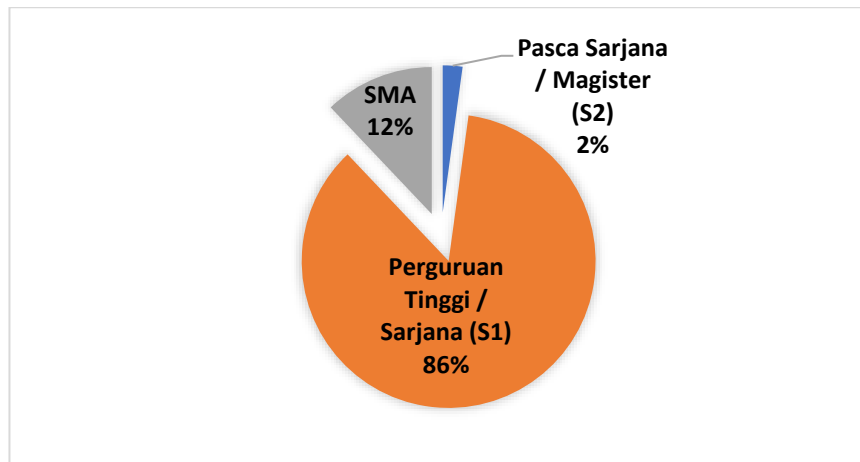
**Figure 3. Age**

Based on Figure 3 above, it can be seen that the majority of respondents were aged between 31-35 years, with 105 people or 33% at this age, employees who are no longer considered young, have a lot of experience, a strong work ethic, are not easy to experience

mental pressure and commitment to work. Second place was followed by respondents aged between 25-30 years with 101 people or 31%. The third place is those aged 36-40 years, namely 77 people or 24%, and 40-50 years old, 15 people or 5%. This shows that workers in the manufacturing sector are mostly from young to adult ages and are a very productive age.

### Characteristics of Respondents Based on Last Education

The presentation of respondent data based on the latest education that has been collected is as follows:



Source: Primary Data Processing Results, 2024

Picture. 4 Last Education

Based on Figure 4, the data shows that the largest number of respondents was from the group of respondents with a bachelor's degree, namely 277 people or 86%. Then as many as 39 people or 12% had a high school education and 7 people or 2% had a master's degree. This shows that employees who work in the food and beverage manufacturing sector mostly have a bachelor's degree. This shows that the higher the respondent's education, the higher their abilities and the higher the possibility of success in carrying out their duties.

### Analysis i Measurement i (Outer i Model)

Shows that the KPT4 indicator is invalid so stage 2 data processing is carried out with the following results

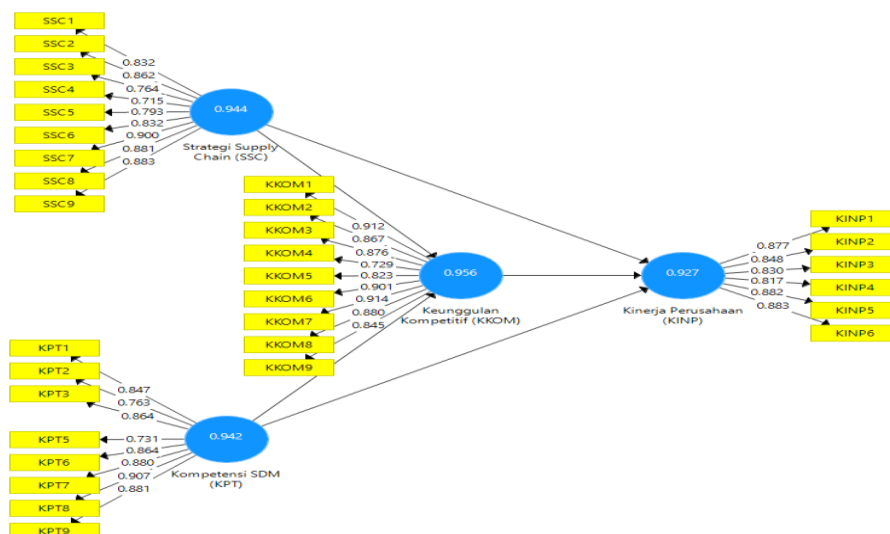


Figure 5 Outer Loading Stage 2

**Table 2 Outer Loadings**

	Superiority Competitive (KKOM)	Performance Company (KINP)	Competence HR (KPT)	Supply Strategy Chain (SSC)
KINP1		0.877		
KINP2		0.848		
KINP3		0.830		
KINP4		0.817		
KINP5		0.882		
KINP6		0.883		
KKOM1	0.912			
KKOM2	0.867			
KKOM3	0.876			
KKOM4	0.729			
KKOM5	0.823			
KKOM6	0.901			
KKOM7	0.914			
KKOM8	0.880			
KKOM9	0.845			
KPT1			0.847	
KPT2			0.763	
KPT3			0.864	
KPT5			0.731	
KPT6			0.864	
KPT7			0.880	
KPT8			0.907	
KPT9			0.881	
SSC1				0.832
SSC2				0.862
SSC3				0.764
SSC4				0.715
SSC5				0.793
SSC6				0.832
SSC7				0.900
SSC8				0.881
SSC9				0.883

Source: Smart PLS Program Output (2024)

Based on table 4.6, it shows that variable indicators that have a loading value greater than 0.70 have a high level of validity, so they meet convergent validity. Thus the analysis continues with the Average Variance Extracted (AVE) test and the Discriminant Validity test.

1. Discriminant Validity

Criteria next on test validity discriminant is using seeing mark Heterotrait-Monotrait Ratio (HTMT) use limits The maximum HTMT value is 0.90. The results of the Heterotrait-Monotrait discriminant validity test can be reviewed in Table 3

**Table 3 Heterotrait-Monotrait Ratio (HTMT)**

	Superiority Competitive (KKOM)	Performance Company (KINP)	Competence HR (KPT)	Strategy Supply Chain (SSC)
Competitive Advantage (KKOM)				
Company Performance (KINP)	0.850			
HR Competency (KPT)	0.695	0.719		
Supply Chain Strategy (SSC)	0.679	0.709	0.368	

Source: Smart PLS Program Output (2024)

Based on the data presented in table 3 above, it is stated that the variables used in this research have good discriminant validity in compiling their respective variables. The



recommended measurement value for HTMT analysis in PLS has been set to be smaller than 0.85, although there are values above 0.85 to a maximum of 0.90 which are still considered sufficient. In Table 3, the HTMT criteria are <0.9, so it has met the discriminant validity test criteria.

2. Average Variance Extracted (AVE)

Convergent validity can also be seen from the Average Variance Extracted (AVE) value. In this research, the AVE value for each construct was above 0.5 (Ghozali, 2016). Therefore, there are no convergent validity problems in the model tested. The results of the Average Variance Extracted value can be seen in table 4.

**Table 4 Average Variance Extracted**

	Average Variance Extracted (AVE)
Supply Chain Strategy (SSC)	0.691
HR Competency (KPT)	0.713
Competitive Advantage (KKOM)	0.744
Company Performance (KINP)	0.734

Source: Smart PLS Program Output (2024)

From Table 4. it is known that the AVE value for each construct is above 0.5. Therefore, there are no convergent validity problems in the model tested so that the construct in this research model can be said to have good discriminant validity.

3. Reliability Test

Apart from being measured by assessing convergent validity and discriminant validity, the outer model can also be done by looking at the reliability of the construct or latent variable which is measured by looking at the composite reliability value of the indicator block that measures the construct. The PLS output results for the composite reliability and Cronbach alpha values can be seen in the following table:

**Table 5 Composite Reliability**

Variable	Composite Reliability	Rule of Thumb	Conclusion
Supply Chain Strategy (SSC)	0.944	0.70	Reliable
HR Competency (KPT)	0.942	0.70	Reliable
Competitive Advantage (KKOM)	0.956	0.70	Reliable
Company Performance (KINP)	0.927	0.70	Reliable

Source: Smart PLS Program Output (2024)

Table 5, the model shows that the composite reliability value for all constructs is above 0.70. Thus it can be concluded that all constructs have good reliability in accordance with the minimum value limits required (Ghozali, 2016:75)

The outer model is also measured by assessing convergent validity and discriminant validity. It can also be done by looking at the reliability of the construct or latent variable which is measured by looking at the cronbach alpha value of the indicator block that measures the construct. A construct is declared reliable if the T-Statisticssonbach alpha value is greater than 0.60.

**Table 6. Cronbach's Alpha**

Variable	Cronbach's Alpha	Rule of Thumb	Conclusion
Supply Chain Strategy (SSC)	0.952	0.6	Reliable
HR Competency (KPT)	0.952	0.6	Reliable
Competitive Advantage (KKOM)	0.963	0.6	Reliable
Company Performance (KINP)	0.943	0.6	Reliable

Source: Smart PLS Program Output (2024)

Based on the table above, it can be concluded that the variables Supply Chain Strategy, Human Resource Competency, Company Performance and Competitive Advantage are declared reliable because they have T-Statisticsonbach's alpha values above 0.6 (Ghozali, 2016:75). Thus it can be concluded that all constructs have good reliability in accordance with the minimum value limits required.

**Structural Model Analysis or Inner Model**

1. R i Square i (R<sup>2</sup>)

In assessing the structural model with PLS, we start by looking at the R-Square value for each endogenous latent variable as the predictive power of the structural model. Changes in the R-Square value can be used to explain the influence of certain exogenous latent variables on whether endogenous latent variables have a substantive influence. R-Square values of 0.75, 0.50, and 0.25 can be concluded that the model is strong, moderate and weak (Ghozali, 2016). To see the R-Square value, see table 7.

**Table 7 R Square Result**

	R Square	R SquareAdjusted
Competitive Advantage (KKOM)	0.636	0.633
Company Performance (KINP)	0.729	0.726

Source: Smart PLS Program Output (2024)

Based on Table 7 above, it shows that the R Square value for the competitive advantage variable is 0.636. This gain explains the large percentage of competitive advantage is 63.6%. Based on this, the results of the R<sup>2</sup> calculation show that the value is strong. This means that the variables Supply Chain Strategy and human resource competency have a direct influence on competitive advantage amounting to 63.6% and the remaining 36.4% is influenced by other variables.

Meanwhile, the R Square value for the company performance variable is 0.729. This gain explains the large percentage of competitive advantage is 72.9%. Based on this, the results of the R<sup>2</sup> calculation show that the value is strong. This means the variables Supply Chain Strategy , human resource competency and competitive advantage has a direct effect on company performance amounted to 72.9% and the remaining 27.1% was influenced by other variables.

2. Q Square

Q-square can be seen in the blindfolding calculation results in the construct cross validated redundancy section. The results of these calculations can be seen in table 8 below.

**Table 8 Blindfolding results**

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Competitive Advantage (KKOM)	2907,000	1563,591	0.462
Company Performance (KINP)	1938,000	920,350	0.525
HR Competency (KPT)	2584,000	2584,000	
Supply Chain Strategy (SSC)	2907,000	2907,000	

Source: Smart PLS Program Output (2024)

From results calculation Which There is on table 8 . mark Q<sup>2</sup> is 0.462 and 0.525. Because n i lai Q<sup>2</sup> more from zero , then model the Already fulfil relevance of predi c t i f in m ana The model has been reconstructed well.

3. Goodness of Fit (GoF) Assessment

Apart from that, based on the data processing that has been carried out using program, the **Model** Fit values are obtained as follows i : i

**Table 9 models**

	Saturated Model	Estimated Model
SRMR	0.082	0.082
D ULS	3,570	3,570
D G	3,913	3,913
Chi-Square	5849,646	5849,646
NFI	0.611	0.611

Source : i : i Output i Program i Smart i PLS (2024)

The Results of the goodness of test PLS Table 9 below show that the NFI value of means FIT. Thus, from these, it be that the model in this research has igoodness of fit and is suitable for use test hypotheses.

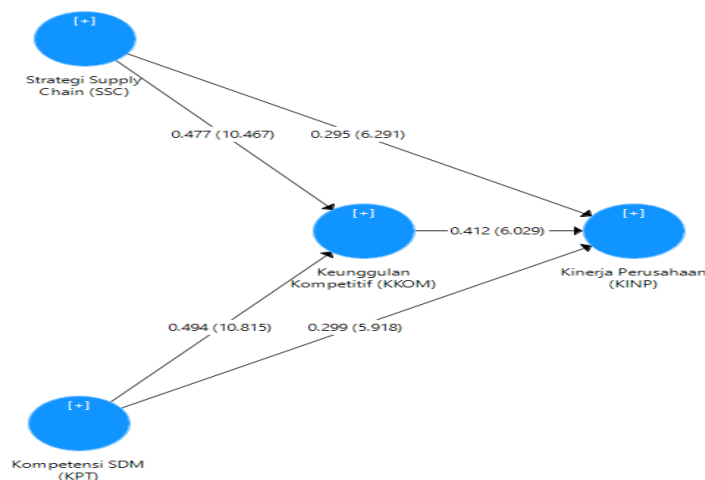
4. Hypothesis Testing Results (Bootstrapping)

Model evaluation is carried out by looking at the significance value to determine the influence of variables through a bootstrapping procedure (Ghozali, 2016: 80). Hypothesis testing in this research was carried out by looking at T-Statistics and P-Values. The hypothesis is declared accepted if the T-Statistics value is > 1.96 (t<sub>table value</sub>) and P-Values < 0.05. The following are the results of Path Coefficients of direct influence :

**Table 10 Direct Influence and Indirect Influence**

	Direct Influence and Non-Influence	Coefficient Parameter	T-Statistics	P-Values	Results
H 1	Supply Chain Strategy (SSC) -> Company Performance (KINP)	0.295	6,291	0,000	Accepted
H 2	HR Competency (KPT) -> Company Performance (KINP)	0.299	5,918	0,000	Accepted
H 3	Competitive Advantage (KKOM) -> Company Performance (KINP)	0.412	6,029	0,000	Accepted
H 4	Supply Chain Strategy (SSC) -> Competitive Advantage (KKOM)	0.477	10,467	0,000	Accepted
H 5	HR Competency (KPT) -> Competitive Advantage (KKOM)	0.494	10,815	0,000	Accepted
H 6	Supply Chain Strategy (SSC) -> Competitive Advantage (KKOM) -> Company Performance (KINP)	0.196	4,742	0,000	Accepted
H 7	HR Competency (KPT) -> Competitive Advantage (KKOM) -> Company Performance (KINP)	0.204	4,882	0,000	Accepted

Source i : i Output i Program i Smart i PLS i (2024)



Source i : i Output i Program i Smart i PLS (2024)

**Figure 6. Research Results Matrix**

From the results of respondents' responses based on variables, dimensions and indicators, it can be explained that:

1. Supply Chain Strategy . This variable has dimensions which are divided into three, which include preventive actions, customer service, and response time to problems. The assessment results from 323 respondents showed that the Supply Chain Strategy as a whole received a good rating with an average score of 4.13. The preventive action dimension reached the highest value of 4.26, indicating awareness and caution in anticipating problems. However, the customer service dimension has the lowest score, especially in the Problem Response Time indicator, which needs to be improved to increase customer satisfaction.
2. Human resource competency. This variable reflects the company's human resource competency. Divided into three dimensions, namely skills, knowledge and domain expertise. The assessment from respondents shows that human resource competency is rated well with an average score of 4.12. The skills dimension has the highest value of 4.26, while the knowledge dimension has the lowest value of 4.03. This shows that the company has good expertise and skills, but there is room for improvement in specific domain knowledge.
3. Competitive Advantage: This variable consists of three dimensions, namely effectiveness, responsiveness, and product or service quality. From the respondents' assessment, Competitive Advantage received a good rating with an average score of 4.12. The effectiveness dimension achieved the highest value of 4.24, while the responsiveness dimension had the lowest value, especially in the Product or Service Quality and Effective Communication in Critical indicators, which shows a better expansion in the aspect of responsiveness to the market and customer needs.
4. Company performance. This variable is divided into two dimensions, namely non-financial aspects and financial aspects. From the respondents' assessment, the Company's performance received a good rating with an average score of 4.14. The non-financial aspect dimension obtained the highest index, while the financial aspect dimension had the lowest value. The emphasis on non-financial aspects shows the importance of a more holistic performance evaluation, including aspects such as innovation, customer satisfaction and company reputation.

Overall, the assessments from respondents highlight areas that need to be improved and improved in various strategic and operational aspects of the company to increase their performance and competitiveness in the market

Based on research findings, it shows that the third equation shows that the direction of the relationship between Supply Chain Strategy, human resource competence, competitive advantage and company performance is positive with a total influence of  $R^2 = 0.729$ . This shows that company performance can be explained by Supply Chain Strategy , human resource competence, competitive advantage by 72.9%, while 27.1% is explained by other variables not examined in this research. Apart from that, the biggest variable that influences company performance is Supply Chain Strategy at 0.477 compared to competitive advantage and HR competency.

This confirms that the factors that make a company superior in the market, such as product innovation, operational efficiency, product quality, or superior service, have a large impact on the company's overall performance.

Thus, companies need to focus on developing and strengthening their competitive advantages to ensure long-term growth and sustainability. This can be done by continuously improving product or service quality, offering unique added value to customers, improving operational processes, and remaining innovative in the face of market changes and industry competition. By understanding the importance of competitive advantage, companies can

direct their resources and strategies to achieve a stronger and more sustainable position in the market.

Competitive advantage is a strength that a company has that cannot be imitated by competitors, durability and ease of matching, where competitive advantage is the heart of organizational performance in a competitive market (Azhad, Seno & Nurul, 2019). The existence of differences in strengths that competitors do not have, creates opportunities for companies to get better performance than competitors. The more effective and responsive a company is in analyzing environmental changes, the more competitive its performance will be.

### **Supply Chain strategy on company performance**

The results of testing hypothesis 1 using SEMPLS show that Supply Chain Strategy has a positive and significant effect on Company Performance. Based on testing hypothesis 1, it shows that the parameter coefficient value obtained is 0.295 and the T-Statistics value obtained is 6.291 with a significance obtained of 0.000 ( $p < 0.05$ ). The results of hypothesis 1 show a positive and significant influence between Supply Chain Strategy and Company Performance, indicating that changes or variability in Supply Chain Strategy are significantly related to significant changes or variability in Company Performance.

Supply chain strategy as the process of managing organizational resources in a way that best suits supply chain capabilities and meets competitive strategy by exploiting the right balance between efficiency, effectiveness and responsiveness (Khan, Christopher & Creazza, 2012).

In this case, supply chain strategy refers to the methods, policies, or steps a company takes to manage the flow of goods and information from source to consumer. On the other hand, company performance includes the achievement of goals and evaluation criteria used to evaluate company operations, such as profitability, operational efficiency, customer satisfaction, etc.

A positive effect indicates that when the supply chain strategy improves or changes, the company's performance also tends to increase or change in line with the strategy. This influence can be seen as a stronger link between the way a company manages its supply chain and its performance.

This is supported by research conducted by Bach, Amir, Sanda & Jusuf (2023); Ali, Liu, Mohsin & Ahasan (2023); Ali & Muhammad (2023); Uddin (2022) and Lee (2021) say that Supply Chain strategy influences company performance.

### **The influence of human resource competency on company performance**

The results of testing hypothesis 2 using SEMPLS show that human resource competency has a positive and significant effect on company performance. Based on testing hypothesis 2, it shows that the parameter coefficient value obtained is 0.299 and the T-Statistics value obtained is 5.918 with a significance obtained of 0.000 ( $p < 0.05$ ). The results of hypothesis 2 show that it is accepted, which means that based on the data and analysis carried out, there is a significant relationship or influence between the level or quality of a company's human resource competency and company performance.

A person's competency in carrying out work does not stand alone, but is influenced by several factors such as beliefs and values, skills, experience, personal characteristics, motivation, emotional, intellectual and organizational culture (Moehariono, 2012; Bhattacharyya, 2018). Competence is the main characteristic possessed by a person which causes the ability to perform effectively or excel at work (Mitrani, 1994).

Human resource competency refers to the combination of knowledge, skills and attitudes possessed by employees in an organization. Employees who feel competent and supported to develop their skills tend to be more satisfied with their jobs. Employee

satisfaction can have a positive impact on company performance through increasing loyalty, retention and team collaboration.

This is in line with Awad's (2022) research; Wajdi, Marlina, Desmintari & Purbudi (2020); Yuniawan, Dikdik, Eldes & Iqbal (2020); Hidayat, Iyus, Sri & Dewi (2019); Meliana, Yusrizal, Trisna & Fitra (2021) stated that human resource competency influences company performance.

### **The influence of competitive advantage on company performance**

The results of testing hypothesis 3 using SEMPLS show that competitive advantage has a positive and significant effect on company performance. Based on hypothesis testing 3, it shows that the parameter coefficient value obtained is 0.412 and the T-Statistics value obtained is 6.029 with a significance obtained of 0.000 ( $p < 0.05$ ). The results of hypothesis 3 show that it is accepted, meaning that competitive advantage is generally considered an important factor in a company's success.

This is in line with competitive advantage as a strength possessed by a company that cannot be imitated by competitors, durability and ease of matching, where competitive advantage is the heart of organizational performance in a competitive market (Azhad, Seno & Nurul, 2019).

When competitive advantage has a positive and significant effect on company performance, this indicates that the factors that support competitive advantage also contribute to the company's ability to achieve the desired goals and results. This could include increasing revenue, profitability, market share, or meeting other strategic objectives. These results can provide valuable insights for company management in planning their business strategies. They may prioritize efforts to strengthen or maintain their competitive advantages as part of efforts to improve overall company performance.

The results of this research are in line with the results of Beigi, Esmaeil, Rasoul & Muhammad (2023); Ghasemi & Omid (2015); Christian (2020); Noviyana & Riris (2023); and Setyawati and Monica (2017) who stated that competitive advantage variables influence company performance.

### **Supply Chain strategy on competitive advantage**

The results of testing hypothesis 4 using SEMPLS show that Supply Chain Strategy has a positive and significant effect on competitive advantage. Based on hypothesis testing 5, it shows that the parameter coefficient value obtained is 0.477 and the T-Statistics value obtained is 10.467 with a significance obtained of 0.000 ( $p < 0.05$ ). The results of hypothesis 5 show that it is accepted, meaning a good Supply Chain Strategy can have a positive and significant impact on a company's competitive advantage. Supply Chain refers to the entire network involved in the production and distribution of products from raw materials to final consumers. Supply Chain Strategy aims to create a cost efficient supply chain with a focus on reducing waiting time and inventory waste, (Qrunfleh & Tarafdar, 2013).

Supply Chain strategy helps in managing stock better. By optimizing inventory and storage levels, companies can reduce excessive storage costs while ensuring adequate product availability to meet market demand. So, a good Supply Chain strategy plays an important role in shaping a company's competitive advantage by influencing various aspects of the business, including costs, response to the market, product quality, innovation, customer service, risk management, and inventory management.

This is supported by research conducted by Shahadat, Abu, Robert & Maria (2023); Khaddam, Hani & Basema (2020); Linda, Fadhilah, Sutiyeem & Thesa (2023); Putri, Darwanto, Hartono & Waluyati (2019); and Yujun (2023) who said that Supply Chain strategy variables influence competitive advantage.

### **The influence of human resource competence on competitive advantage**

The results of testing hypothesis 5 using SEMPLS show that human resource competence has a positive and significant effect on competitive advantage. Based on hypothesis testing 5, it shows that the parameter coefficient value obtained is 0.494 and the T-Statistics value obtained is 10.815 with a significance obtained of 0.000 ( $p < 0.05$ ). The results of hypothesis 5 show that it is accepted, meaning that high Human Resource (HR) Competency can have a positive and significant impact on a company's competitive advantage. HR refers to the skills, knowledge, abilities, attitudes and leadership of individuals working in an organization.

Companies that have competent human resources are better able to control changes in the dynamic external environment quickly and effectively. Competitive advantage can be achieved through innovation, while the process of developing or creating new products requires competent human resources with the characteristics of having knowledge, skills, self-concept, personal characteristics and motives that are in accordance with the direction of the company's vision and mission (Abdullah, 2013).

HR who have good interpersonal competence can build stronger relationships with customers. Good communication skills and a deep understanding of customer needs can increase customer satisfaction and their loyalty, providing a competitive advantage.

This is supported by research conducted by Nisha, Nishad & Islam (2022); Melliana, Sinulingga & Nasution (2018); Azhad, Seno & Nurul (2019); Sutiah, Anwar & Slamet (2021); and Agha, Laith & Manar (2012) who said that human resource competency variables influence competitive advantage.

### **Supply Chain strategy on company performance through competitive advantage**

The results of testing hypothesis 6 using SEMPLS show that Supply Chain Strategy has a positive and significant effect on Company Performance through competitive advantage. Based on testing hypothesis 6, the T-Statistics value obtained was 4.742 ( $CR > 1.96$ ). The results of hypothesis 6 show that it is accepted, meaning there is a significant relationship which is an important aspect in operations management and business strategy.

A customer-focused Supply Chain strategy can improve customer integration. Efforts to improve customer service mean that more and more companies are focusing on modifying Supply Chain strategies to meet customer needs (Wisner, 2003).

A good supply chain strategy can increase a company's operational efficiency. This includes proper inventory management, optimizing production processes, reducing logistics costs, and improving product cycle times. A flexible and responsive supply chain allows companies to adapt production and distribution to changing market demands. This allows companies to avoid inventory shortages or excessive overstocks.

An efficient supply chain strategy can help companies identify cost-saving opportunities, whether through price negotiations with suppliers, reducing logistics costs, or optimizing production processes. Through these efforts, supply chain strategy can make a significant contribution to the creation of a company's competitive advantage. The competitive advantage gained from a strong supply chain strategy can differentiate a company from its competitors and directly impact company performance through increased revenue, profitability, market share, and customer satisfaction.

The results of this research are supported by research conducted by Ali, Liu & Ahasan (2023) who said that Supply Chain strategy variables have a significant effect on company performance. Noviyana & Riris (2023), stated that the competitive advantage variable influences company performance. Competitive advantage as a unique set of capabilities of an economic unit that enables it to penetrate arbitrary markets and be superior to competitors (Camison & Lopez, 2011; Kim et al , 2012).

## **The influence of human resource competency on company performance through competitive advantage**

The results of testing hypothesis 7 using SEMPLS show that human resource competence has a positive and significant effect on company performance through competitive advantage. Based on hypothesis 7 testing, the T-Statistics value obtained was 4.882 ( $CR > 1.96$ ). The results of hypothesis 7 show that it is accepted that human resource competence plays an important role in shaping a company's competitive advantage, which in turn influences company performance positively.

This is in line with increasing effective human resource competencies enabling employees to contribute effectively and beneficially to the achievement of organizational goals and objectives (Hua et al, 2020).

This indicates that investment and development in human resources, such as increasing employee knowledge, skills and capacity, can make a significant contribution to a company's ability to create a competitive advantage in the market.

Likewise, previous research is in line with employee commitment and produces positive behavior to increase the effectiveness of organizational performance (Asnordin & Shereen, 2020). Competitive advantage allows companies to penetrate the market and become superior to competitors (Kim et al, 2012).

## **CONCLUSION**

1. Supply Chain Strategy has a significant effect on company performance.
2. Human resource competency has a significant effect on company performance.
3. Competitive advantage has a significant effect on company performance.
4. Supply Chain Strategy has a significant effect on competitive advantage.
5. Human resource competency has a significant effect on competitive advantage.
6. Supply Chain Strategy has a significant effect on company performance through competitive advantage.
7. Human resource competency has a significant effect on company performance through competitive advantage.

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