

## ***IMPROVING FREIGHT FORWARDING PERFORMANCE BY BUILDING COMPETENCIES TO EXECUTE CUSTOMER SERVICE TRANSACTION ELEMENTS***

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### ***ABSTRACT***

The results of a World Bank survey in the form of the Logistics Performance Index (LPI) in 2023 showed that Indonesia's logistics have regressed. Questionnaire indicators in LPI showed the importance of the role of freight forwarding in supporting logistics and international transportation. Customer service as a frontline plays an important role in improving the performance of freight forwarding companies. Customer service requires clear competencies to support their duties and work in freight forwarding companies. This study aims to examine the effect of four customer service competencies on the performance of freight forwarding companies mediated by customer service transaction elements. The four competencies are customer insight skills, freight forwarding management, customer service management, and stakeholder management. The study used quantitative methods with 6 variable constructs and 35 indicators that have been measured, valid, and reliable. The four customer service competencies are exogenous variables, freight forwarding company performance is endogenous variables, and customer service transaction elements are intervening variables. The questionnaire was distributed to customer service employees at ALFI member freight forwarding companies in Jakarta, especially in manager or supervisor positions. The respondents of the study are 210 people. The data was processed using structural equation modeling analysis techniques with the help of AMOS version 24 statistical software.

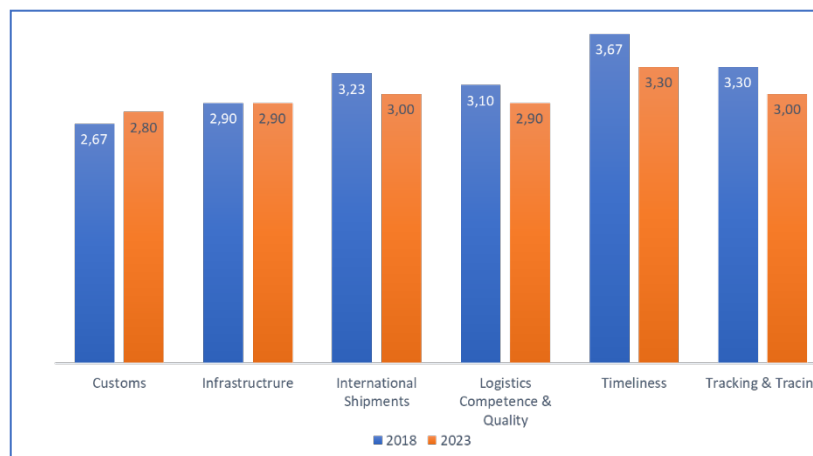
The novelty of this research is to develop customer service competencies for logistics, especially freight forwarding services, through customer service transaction elements. The results showed that the four customer service competencies had a direct positive effect on the performance of freight forwarding companies and had an indirect effect through customer service transaction elements. This research recommends that freight forwarding companies provide more opportunities for customer service to interact with their customers and get enough training to be able to carry out the elements of customer service transactions well. Educational institutions can cooperate with the government in issuing special customer service certifications in the freight

forwarding service industry. Further research can be directed to customer service with more juniors to get a broader view of the scope of work of customer service freight forwarding services.

*Keywords: Customer service competencies, transaction elements, freight forwarding performance*

## A. Introduction

The World Bank periodically conducts a worldwide survey every two years to rank the *Logistics Performance Index* (LPI) (Beysenbaev & Dus, 2020; Civelek et al., 2015; Hamed, 2019; World-Bank, 2023). The results of the 2023 LPI survey show that Indonesia is ranked 61st, down significantly compared to 2018 at 51st. The six parameters used by the World Bank in measuring logistics performance are customs, infrastructure, international transportation, logistics competence, track & trace systems, and timeliness (Beysenbaev & Dus, 2020; Civelek et al., 2015; World-Bank, 2023). The six parameters above mostly refer to international logistics activities facilitated by freight forwarding activities. The difference in Indonesia's logistics performance in 2018 and 2023 for each measurement parameter can be seen in Figure 1, where there is a decline in each parameter, except customs. Even compared to the other five ASEAN countries, Indonesia's LPI is the lowest and the only one to experience a decline in performance in 2023. As archipelagic countries, although both experienced a decline in LPI, Japan is already ranked 13th, while Indonesia is ranked 61st. This condition directly places Indonesia in the category of *partial performers* with the most logistics constraints seen in low- and middle-income countries. These logistics constraints include inadequate infrastructure, lack of technological development, geographic and demographic conditions, and logistics network connectivity.



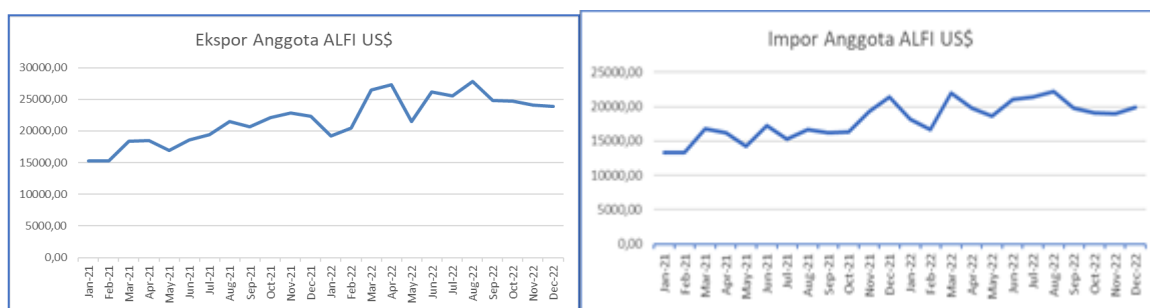
Source: (World-Bank, 2023)

Figure 1. Differences in LPI Parameters in 2018 and 2023.

The LPI score cannot describe a country's logistics performance holistically. However, the LPI score can be used as a *benchmark* by *stakeholders* and policy makers to identify appropriate policies and see opportunities for improvement that can be made in order to improve the quality of national logistics services. Although the logistics system and conditions in each country are different, the LPI can be used as a basic reference (Beysenbaev & Dus, 2020). The LPI published

by the World Bank provides feedback for stakeholders who carry out logistics activities in Indonesia. The results of the Indonesian LPI show the importance of the role of *freight forwarders* in supporting the logistics system in Indonesia (Chang & Thai, 2016; Huang *et al.* , 2019; Rodrigue, 2020; Skiba & Karas, 2022) . The performance of the *freight forwarding* company itself cannot be separated from the role of *customer service* which forms standards and conditions for logistics operations (Hinson *et al.* , 2020b; Kulyk *et al.* , 2017) . If the *freight forwarding customer service* does not have good competence and skills, there will be delays in the administrative process and errors in shipping documents which will result in an increase in *dwelling time* (Kourounioti *et al.* , 2016; Purwoko & Maulina, 2019; Rodrigue, 2020; World Bank, 2015)

The failure to improve the six LPI parameters is an indicator of the cause of high logistics costs in Indonesia. In terms of logistics costs, Indonesia is among the highest (World-Bank, 2023) . Referring to the results of the *World Bank's calculations* in 2020 and the Ministry of Finance's Report in 2021, Indonesia's logistics costs are 24% of Gross Domestic Product (GDP). This figure is higher than other ASEAN member countries (World-Bank, 2023) (Ministry of Finance, 2023) . The progress of a country can be seen from the value of its international trade transactions through export and import activities (Redmond & Nasir, 2020) . Indonesia's exports and imports show a stable trend, although they fluctuate and experience a slowdown in early 2023 (BPS, 2023) . Exports of oil and gas, agricultural and forestry products generally use sea transportation in the form of bulk ships. Non-oil and gas products can use sea, air, or land transportation. The fisheries industry requires special treatment by using refrigerated containers. The largest import commodities are raw materials or auxiliary materials for the needs of the manufacturing industry, followed by capital goods and consumer goods. Imports generally use sea and air transportation, where the use of containers is the main choice. However, export and import data from ALFI (Indonesian Logistics and *Forwarders Association* ) members actually showed an increase in 2021 and 2022 as shown in Figure 2.



Source: (ALFI, 2023)

Figure 2. Growth of Exports and Imports of ALFI Members

Logistics plays a very important role in supporting export and import activities. *Freight forwarding* is a part of logistics that is directly related to export and import activities, especially transportation activities, and is related to customer companies , both directly and indirectly. (Purwoko *et al.*, 2023; Rodrigue, 2020; Schramm, 2012; Vidovic *et al.*, 2015) . According to

Karingithi (2013) , export and import activities can be used as indicators of the national economy which are greatly influenced by the performance of *freight forwarders* . Transportation costs, which are part of logistics costs, are still the main problem for *freight forwarding companies* in Indonesia as providers of domestic and international shipping *outsourcing services*. *Freight forwarding companies* in Indonesia are faced with the constraint of fulfilling goods deliveries that are not yet effective and efficient, due to the limited capacity of transportation modes and the geographical conditions of Indonesia. Therefore, many Indonesian *freight forwarding companies* are unable to compete with logistics companies in other countries.

The nature of *freight forwarding* activities is *Business-to-Business* ( *B2B* ), so that interpersonal relationships are highly prioritized (Gil-Saura et al., 2018; Kadłubek et al., 2022; Lucas, 2014; Shang & Lu, 2012) . *Customer service* of logistics companies, especially *freight forwarding*, plays an important role in providing services effectively, efficiently, and with high quality (Gizaw et al. , 2021; Shang & Lu, 2012; Yang & Xue, 2020) . *Customer service* is one of the driving forces of *freight forwarding activities* that influences the performance of the *freight forwarding company* itself (Kadlubek, 2020; Shang & Lu, 2012) . Increasing customer expectations and changing commodity markets require the role of *customer service* as a competitive weapon to accommodate them (Bowersox et al. , 2020; Christopher, 2011; Lucas, 2014) . The capacity of human resources (HR) of *customer service* working in the *freight forwarding sector* is still very low. One of the reasons according to Lin & Chang (2018) is because they do not come from special schools of logistics management, so their understanding and performance are based on experience ( *learning by doing* ) . The professionalism factor of *customer service* in managing and taking care of export and import documents, including good coordination with related parties, is one of the factors that greatly affects the performance of *freight forwarding companies* .

*Customer service* in carrying out its functions must carry out three transaction elements, including the pre-transaction stage, the transaction stage, and the post-transaction stage (Christopher, 2011; Ciechomski & Strojny, 2022; Gizaw et al. , 2021; Kadlubek, 2020; Kułyk et al. , 2017) . Kułyk 's research results (2017) shows the transaction stage as the stage most often carried out by *customer service* , followed by the pre-transaction stage, and the post-transaction stage. These three transaction elements must be carried out simultaneously and sequentially in order to carry out the *customer service* function properly. Therefore, *customer service for freight forwarding* services must have the competencies needed to carry out the three elements of the transaction in order to provide excellent service to customers (Kadlubek, 2020) .

Grzeskowiak et al. (2022) in their research results on students in logistics schools showed a mismatch between student competencies and those needed in the world of work. Loyalty, commitment, and responsibility are not competitive factors in the logistics industry, but rather communication and teamwork skills. Sadri et al. (2021) identified the competencies that must be possessed by logistics service company workers. These competencies are needed to strengthen the national logistics system. The competencies most needed by logistics services are in order according to Sadri et al. (2021) are foreign language skills, supervision, and planning. The ability

to get the right *freight forwarding employees not only ensures that the business operates normally but can also create strong competitiveness* (Nguyen, 2021) . According to Pratama & Permatasari (2021), *freight forwarder employees* who do not have a maritime management background or maritime understanding competency will experience obstacles when preparing export declarations for goods by sea. Ngamvichaikit (2017) provides three types of competencies that are very important for all *freight forwarding employees*, especially those related to multimodal transportation management, namely knowledge, skills, and attitudes.

Research by Čižiuniene *et al.* (2016) showed the need for the HR department of transportation and logistics companies to pay attention to the competence of their employees so that employees feel more cared for and empowered. This will have an impact on reducing the rate of potential employee turnover ( *labor turnover* ). The HR department plays an important role in improving employee skills, creating employee incentive systems, and ensuring employee involvement in the internal integration process with suppliers and customers (Farmania *et al.* , 2021) . The *customer service* transaction element in this study is an *intervening* variable to analyze variations in direct and indirect influences, namely *customer service* competence as an exogenous variable *on the performance of freight forwarding* service companies as endogenous variables.

### **Resource Based View Theory and The Dynamic Capabilities View**

Profit-oriented companies will strive to survive, because the organization continues to face changes in the internal and external environment, and can even win the competition. (Hanelt *et al.* , 2021; Zinovieva & et.al, 2016) . Internal environmental changes relate to changes in goals, strategies, organizational policies, and human resource competencies. External environmental changes include culture, education, social, economic, technological, and political. Concrete forms of these changes include rising costs, high interest rates, scarcity of various natural resources, and government regulations. Baden-Fuller & Teece (2020) show the failure of dynamic competencies in the face of poor strategies, which concentrate on technologies and practices that facilitate integration within and across company boundaries. ParaResearchers identify various characteristics of *customer service competencies* that are explicitly aimed at integrating functional areas within the company and customers who are direct partners of the company.

### **Logistics and Transportation Management**

Transportation is the activity of moving goods and passengers using transportation facilities and infrastructure safely, securely, integrated, quickly, smoothly, on time, and according to plan (Anggraini *et al.*, 2016; Bowersox *et al.*, 2020; Purwoko *et al.*, 2019; Senna *et al.*, 2020) . Transportation management according to Nguyen (2021) is part of logistics management. Transportation speed is important because customers value fast service. Increasing speed causes costs to skyrocket, so it is necessary to maximize efficiency. An efficient and responsive supply chain allows them to go beyond their competitors in business performance (Chopra & Peter, 2002; Natto, 2014; Xu & Liu, 2014) .

### ***Freight forwarding company performance***

The logistics performance of a country plays an important role in the economy as a catalyst for the relationship between competitiveness and welfare (Civelek *et al.* , 2015) . Logistics performance is influenced by several factors, such as inventory flexibility, continuous improvement, supply chain design, operational monitoring and control, and the competence of logistics actors (Bowersox *et al.* , 2020; Nguyen, 2021) . The logistics performance of a country is conveyed as a survey report by the World Bank, namely *the Logistics Performance Index* (Beysenbaev & Dus, 2020; Civelek *et al.*, 2015; Hamed, 2019; World-Bank, 2023) . The performance of *freight forwarding* companies is also related to logistics performance, especially those related to globalization and international trade (Bowersox *et al.* , 2020; Hamed, 2019) . International trade itself is the exchange of goods or services across national jurisdictions (Rodrigue, 2020) . The World Bank LPI results show that the six logistics components submitted to respondents all refer to *freight forwarding activities*. The six components are customs efficiency, quality of trade and transportation-related infrastructure, competitively priced international shipping, competence and quality of logistics services, *track and trace facilities* ; and punctuality of delivery (Beysenbaev & Dus, 2020; Civelek *et al.*, 2015; Hamed, 2019; World-Bank, 2023) .

### ***Customer Service Competence***

*Customer service* plays a very important role in carrying out integrated logistics activities, especially in *freight forwarding* , considering the three flows in the supply chain that must be maintained (Nguyen, 2021) . One of the components of LPI is the competence and quality of logistics services (World-Bank, 2023) . *Customer service* competence will lead to improved service quality in achieving performance , increasing competitiveness and customer satisfaction. (Russ-Eft, 2014) . According to Hinson *et al* , (2020) *customer service* competency is one of the important factors in the results of customer satisfaction surveys. Competencies required by *customer service* according to Robert (2014) include adaptability, attention to detail, caring, collaboration, communication skills, creative and broad thinking, focus on results, initiative, negotiation, problem solving, and professionalism.

Researchers propose four competencies to be possessed by *freight forwarding customer service* . The first competency is the skill of understanding customers or having customer insight. (Lee & Song, 2018; Skiba & Karas, 2022) . The second competency is the skill of understanding knowledge and carrying out operations in the field of *freight forwarding* (Ngamvichaikit, 2017; Yang & Xue, 2020) . The third competency is management skills . *customer service* (Knapp, 2015; Russ-Eft, 2014) . The fourth competency is stakeholder management skills . (Bak, 2018; McGahan, 2021) .

### Customer Service Transaction Elements

*customer service* transaction elements in this study are the ability of *customer service* to provide services to customers starting from pre-transaction, transaction, and post-transaction (Christopher, 2011; Gizaw *et al* , 2021; Kulyk *et al* , 2017; Schramm, 2012) . Pre-transaction elements are all activities in preparation for transactions or operations, such as company policies, SOP and KPI agreements, and accessibility. Transaction elements are physical distribution activities and are supported by administrative activities. Included in this stage is notification of delivery status to customers. Post-transaction elements include all activities after the transaction is completed, such as handling complaints and demands and the feedback process.

The research framework built in this study can be seen in Figure 3.

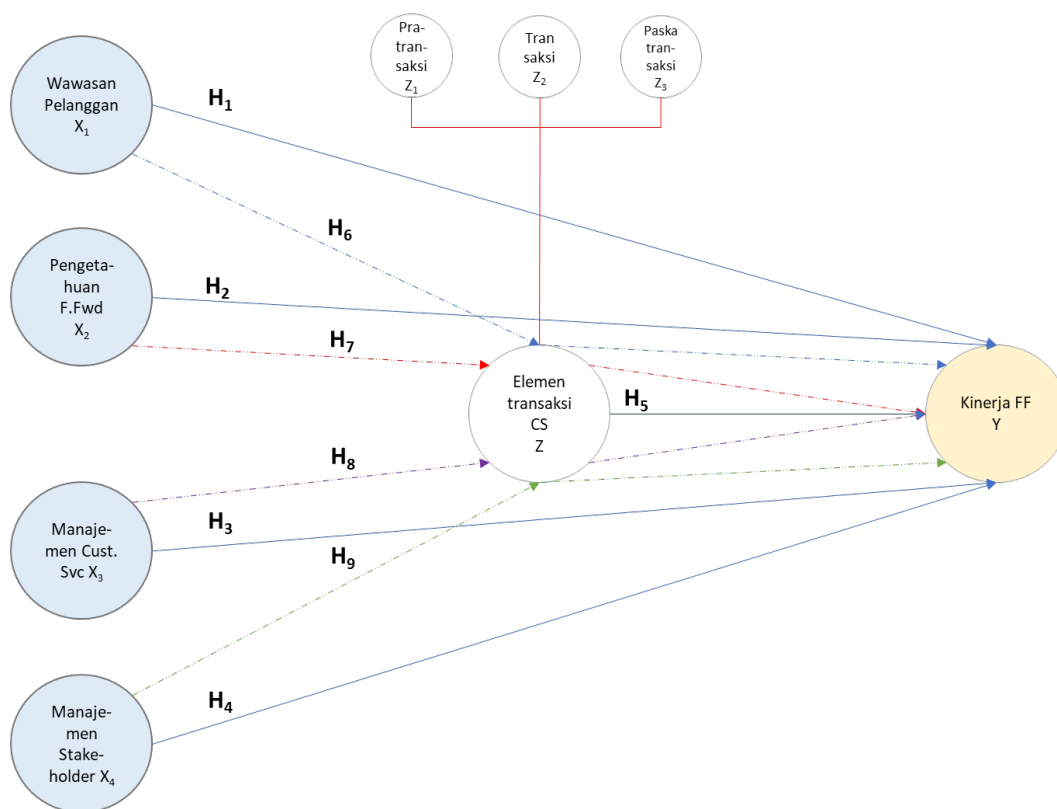


Figure 3. Research Framework

Based on the theory and framework above, the following research hypothesis can be proposed:

- H<sub>1</sub>:** Customer understanding skills competency is thought to influence the performance of *freight forwarding companies* (Christopher, 2011; Katuse, 2020; Lee & Song, 2018; Vidovic *et al.*, 2015) .
- H<sub>2</sub>:** *Freight forwarding* management skills competency is thought to have a significant influence on the performance of *freight forwarding companies* (Ngamvichaikit, 2017; Nguyen, 2021)

- H<sub>3</sub>:** *Customer service* skill competency is thought to have a significant influence on the performance of *freight forwarding companies* (Huang et al., 2019; Melović et al., 2015) .
- H<sub>4</sub>:** *Stakeholder management* skills competency is thought to have a significant effect on the performance of *freight forwarding companies* (Hinson et al., 2020b; McGahan, 2021) .
- H<sub>5</sub>:** *Customer service* transaction elements are thought to have a significant influence on the performance of *freight forwarding companies* (Christopher, 2011; Gizaw et al., 2021; Kulyk et al., 2017; Melović et al., 2015; Schramm, 2012) .
- H<sub>6</sub>:** Customer understanding skills competency (customer insight) is thought to have a significant influence on *customer service* transaction elements (Christopher, 2011; Hinson et al., 2020b; Wright et al., 2021a) .
- H<sub>7</sub>:** *Freight forwarding* management skills competency is thought to have a significant influence on *customer service transaction elements* (Bowersox et al., 2020; Huang et al., 2019; Schramm, 2012; Shang & Lu, 2012; Zhang et al., 2021) .
- H<sub>8</sub>:** *Customer service* management skills competency is thought to have a significant influence on *customer service* transaction elements (Huang et al., 2019; Shang & Lu, 2012) .
- H<sub>9</sub>:** *Stakeholder* management skills competency is thought to have a significant influence on *customer service* transaction elements (Oshri et al., 2015; Ricardianto et al., 2022) .

## B. Research methods

The stages in this study start from a pre-research survey to observe, see, and hear all the phenomena in the field, literature studies related to the use of relevant theories, and re-studying the results of previous studies. Population according to Cooper & Schlinder (2014) is the total collection of elements that are expected to be able to draw several conclusions. The population in the study was 3,521 *freight forwarding companies* that are members of ALFI, of which 43% or 1,514 companies are located in the Jakarta area (ALFI, 2023) . The sample in this study was obtained using a *purposive sampling technique* on ALFI members (Etikan, 2016) . From the population of 1,514 ALFI members in Jakarta, a target population of 491 *freight forwarding companies will be taken* , where one company can be represented by more than one *customer service actor*.

According to Hair *et al.* (2019) sample size depends on the number of indicators used in all variables. In general, a sample size of more than 100 is better, but a sample size smaller than 100 is acceptable, depending on the background of the study (Hair et al., 2019) . The number of samples is the same as the number of indicators multiplied by five to ten. In this study, there were five variables studied with a total of 35 indicators. With the following calculation:  $n = 6$  (between 5 and 10)  $\times 35$  indicators = 210 respondents. So the minimum number of samples in this study is 210 respondents.

The data sources in this study consist of primary data and secondary data. Primary data were obtained directly from the field using a questionnaire instrument. The researcher used a survey instrument containing statements regarding the research variables asked to respondents. The data scale used was a Likert scale of one, strongly disagree, to five (Jahanshahi et al., 2012) . Secondary data were obtained from publication reports of related agencies, company data, industry association data, national and international books and journals, and scientific articles relevant to the topic of this study.

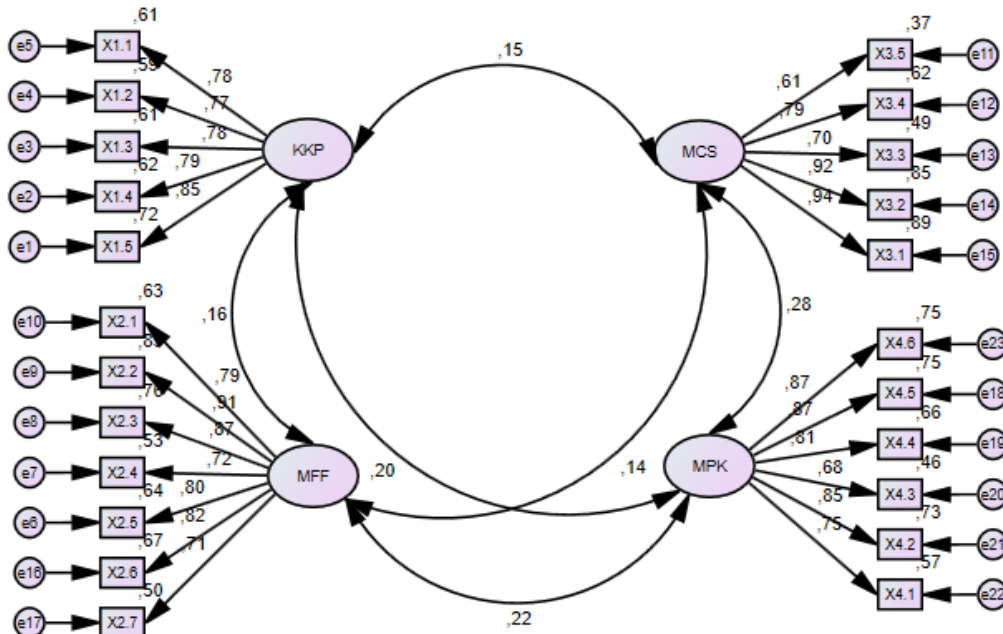
The data analysis method used in this study uses SEM ( *Structural Equation Modeling* ) analysis with the help of *statistical software AMOS version 26 for Windows* . SEM is a statistical technique used to build and test statistical models which are usually in the form of cause and effect or causality models (Sunyoto et al., 2018) .

### C. Results and Discussion

This study was conducted on 210 respondents. As many as 140 people or 67% were male and the rest were female as many as 70 people or 33%. The large number of male respondents as *customer service* is due to the large number of those with operational backgrounds in the *freight forwarding industry*. Respondents aged between 25-30 years were 67 people or 32%. Followed by respondents aged between 36-40 years as many as 54 people or 26%, aged 31-35 years as many as 52 people or 25%, and the remaining 23 people or 16% aged 19-24 years and 40-50 years. This shows that at the *manager level* , most are young to adult and are a very productive age. Based on the last education The largest number of respondents were from the group of respondents with a bachelor's degree, which was 192 people or 91%. As many as 12 people or 6% had a postgraduate/master's degree, and 1% of respondents had a doctoral degree. Meanwhile, 5 people or around 2% had a high school degree. This shows that to occupy a *customer service position* , a fairly high level of education is needed to support success in carrying out their duties.

### Confirmatory Factor Analysis

Confirmatory factor analysis in the reliability construct test is used to show the extent to which a measuring instrument can provide relatively the same results if measurements are taken twice or more on the same subject. The results of the confirmatory factor analysis on exogenous variables can be seen in Figure 4.



Source: Primary Data Processing Results, 2024

Figure 4. Confirmatory Factor Analysis Test of Exogenous Variables

KKP stands for Customer Understanding Skill Competence. MFF is *Freight Forwarding Management Skill Competence*. MCS is *Customer Service Management Skill Competence*. And MPK is *Stakeholder Management Skill Competence*. Confirmatory factor analysis of exogenous variables is presented and explained in Table 1.

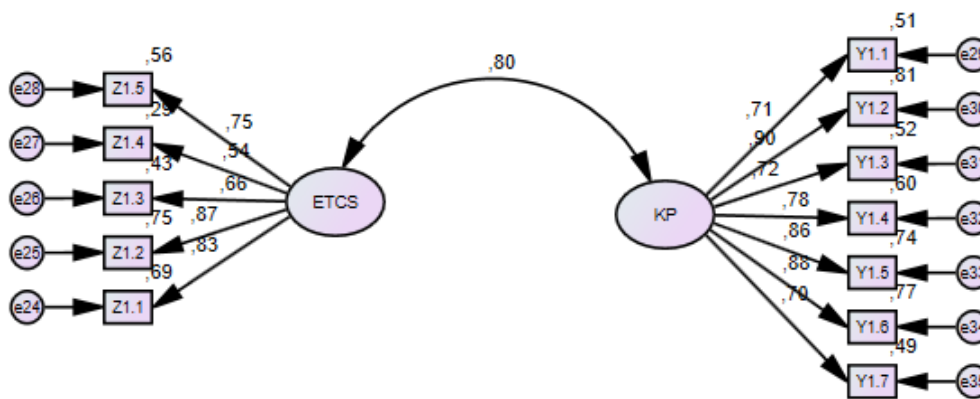
Table 1 Confirmatory Factor Analysis Test  
Exogenous Variables

		Estimate			Estimate
X1.5 ←	KKP	0.847	X3.5 ←	MCS	0.610
X1.4 ←	KKP	0.790	X3.4 ←	MCS	0.788
X1.3 ←	KKP	0.781	X3.3 ←	MCS	0.698
X1.2 ←	KKP	0.769	X3.2 ←	MCS	0.923
X1.1 ←	KKP	0.783	X3.1 ←	MCS	0.942
X2.5 ←	MFF	0.798	X4.5 ←	MPK	0.868
X2.4 ←	MFF	0.725	X4.4 ←	MPK	0.812
X2.3 ←	MFF	0.874	X4.3 ←	MPK	0.681
X2.2 ←	MFF	0.909	X4.2 ←	MPK	0.854
X2.1 ←	MFF	0.792	X4.1 ←	MPK	0.755
X2.6 ←	MFF	0.821	X4.6 ←	MPK	0.865
X2.7 ←	MFF	0.706			

Source: Primary Data Processing Results, 2024

An indicator is said to have good validity if the *loading factor value* (estimation) of the test results is greater than 0.5. The confirmatory factor analysis test gave results for all *loading factor coefficients* greater than 0.5, on the four *customer service competency variables* studied. Thus, all indicators show good validity in measuring the four *customer service competency variables*.

The measurement is continued on the construct of *intervening variables* and endogenous variables, the results of which are presented in Figure 5. ETCS stands for *Customer Service Transaction Elements* and KP stands for *Freight Forwarding Company Performance*. Confirmatory factor analysis of *intervening variables* and endogenous variables is presented in Figure 5 and explained in Table 2.



Source: Primary Data Processing Results, 2024

Figure 5. Confirmatory Factor Analysis Test of *Intervening Variables* and Endogenous Variables

Table 3 Confirmatory Factor Analysis Test of Variables  
*Intervening and Endogenous Variables*

Estimate			Estimate	
Z1.1 ← ETCS	0.832	Y1.2 ← KP	0.898	
Z1.2 ← ETCS	0.865	Y1.3 ← KP	0.723	
Z1.3 ← ETCS	0.657	Y1.4 ← KP	0.777	
Z1.4 ← ETCS	0.537	Y1.5 ← KP	0.862	
Z1.5 ← ETCS	0.745	Y1.6 ← KP	0.875	
Y1.1 ← KP	0.711	Y1.7 ← KP	0.699	

Source: Primary Data Processing Results, 2024

Based on the results of the confirmatory factor analysis test, the results of all *loading factor coefficients* are greater than 0.5, both in the *customer service transaction element variables* and

the performance of *freight forwarding companies* . Thus, all indicators show good validity in measuring *customer service transaction elements* and *freight forwarding company performance* .

### Reliability Construct Test

reliability construct analysis test of the exogenous variables are presented in Table 4. Meanwhile, the results of the reliability construct analysis test of the *intervening variables* and endogenous variables are presented in Table 5.

Table 4. Test of Exogenous Variable Reliability Construct Analysis

			<i>Estimate</i>	<i>Loading Factor</i> <sup>2</sup>	<i>ei=1- LF</i> <sup>2</sup>	CR	AVE
X1.5	←	KKP	0.847	0.717	0.283	0.895	0.631
X1.4	←	KKP	0.79	0.624	0.376		
X1.3	←	KKP	0.781	0.610	0.390		
X1.2	←	KKP	0.769	0.591	0.409		
X1.1	←	KKP	0.783	0.613	0.387		
Amount			3,970	3.156	1,844	0.928	0.650
X2.7	←	MFF	0.706	0.498	0.502		
X2.6	←	MFF	0.821	0.674	0.326		
X2.5	←	MFF	0.798	0.637	0.363		
X2.4	←	MFF	0.725	0.526	0.474		
X2.3	←	MFF	0.874	0.764	0.236		
X2.2	←	MFF	0.909	0.826	0.174		
X2.1	←	MFF	0.792	0.627	0.373	0.898	0.644
Amount			5.625	4,552	2,448		
X3.5	←	MCS	0.610	0.372	0.628		
X3.4	←	MCS	0.788	0.621	0.379		
X3.3	←	MCS	0.698	0.487	0.513		
X3.2	←	MCS	0.923	0.852	0.148		
X3.1	←	MCS	0.942	0.887	0.113		
Amount			3,961	3.220	1,780	0.918	0.654
X4.6	←	MPK	0.865	0.748	0.252		
X4.5	←	MPK	0.868	0.753	0.247		
X4.4	←	MPK	0.812	0.659	0.341		
X4.3	←	MPK	0.681	0.464	0.536		
X4.2	←	MPK	0.854	0.729	0.271		
X4.1	←	MPK	0.755	0.570	0.430		
Amount			4.835	3.924	2,076		

Source: Primary Data Processing Results, 2024

A construct is said to have good reliability if the *construct reliability* (CR) value is greater than 0.7. Table 4 shows the CR value of the competence variable of understanding customers is 0.895. The CR of the competence variable of *freight forwarding management skills* is 0.928. The CR of the competence variable of *customer service management skills* is 0.898. The CR of the competence variable of managing stakeholders is 0.918. Thus, the exogenous construct has good reliability.

Table 5. Reliability Construct Analysis Test of *Intervening Variables* and Endogenous Variables

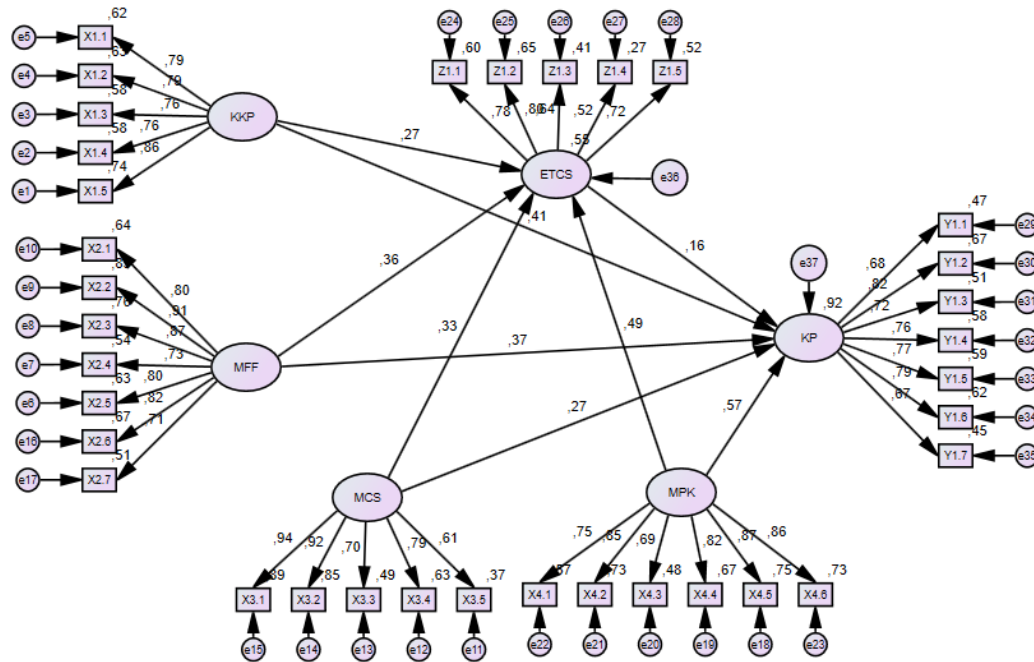
			<i>Estimate</i>	<i>Loading Factor</i> <sup>2</sup>	<i>ei=1- LF</i> <sup>2</sup>	CR	AVE
Z1.1	←	ETCS	0.832	0.692	0.308	0.853	0.543
Z1.2	←	ETCS	0.865	0.748	0.252		
Z1.3	←	ETCS	0.657	0.432	0.568		
Z1.4	←	ETCS	0.537	0.288	0.712		
Z1.5	←	ETCS	0.745	0.555	0.445		
Amount			3.636	2,715	2.285		
Y1.1	←	KP	0.711	0.506	0.494	0.923	0.634
Y1.2	←	KP	0.898	0.806	0.194		
Y1.3	←	KP	0.723	0.523	0.477		
Y1.4	←	KP	0.777	0.604	0.396		
Y1.5	←	KP	0.862	0.743	0.257		
Y1.6	←	KP	0.875	0.766	0.234		
Y1.7	←	KP	0.699	0.489	0.511		
Amount			5,545	4.436	2,564		

Source: Primary Data Processing Results, 2024

*customer service* transaction element variable is 0.853 and on the *freight forwarding company performance variable* is 0.923, greater than 0.5, then the *intervening* and endogenous constructs have good reliability.

### SEM Structural Test

SEM analysis in this study aims to find out more clearly about improving *freight forwarder* performance by building competencies to run *customer service transaction elements*. The results of the SEM model analysis produced are presented in Figure 6.



Source: Research results processed with AMOS 24.0 (2024)

Figure 13 Results of Structural Model Analysis

Based on the analysis of the research results, Table 6 can be made in the form of a recapitulation of the hypothesis test.

Table 6 Hypothesis Test Recapitulation

Alternative Hypothesis (H1)	Path (Relationship)	Path Coefficient	t-value count (>1.96)	Conclusion of Null Hypothesis (H0)
H1	customer understanding skills competency → company performance	0.407	7,680	Accepted
H2	freight forwarding management skills competency → company performance	0.369	6,828	Accepted
H3	customer service management skills competency → company performance	0.272	5.211	Accepted
H4	stakeholder management skills competency → company performance	0.568	8,451	Accepted
H5	customer service transaction elements → company performance	0.160	2.465	Accepted
H6	customer understanding skills competency → customer service transaction elements	0.271	4.333	Accepted

Alternative Hypothesis (H1)	Path (Relationship)	Path Coefficient	t-value count (>1.96)	Conclusion of Null Hypothesis (H0)
H7	<i>freight forwarding</i> management skills competency → <i>customer service</i> transaction elements	0.362	5.613	Accepted
H8	<i>customer service</i> management skills competency → <i>customer service</i> transaction elements	0.326	4.816	Accepted
H9	stakeholder management skills competency → <i>customer service</i> transaction elements	0.486	7.263	Accepted

All the above hypotheses were tested with using software S EM AMOS 24.

### 1. The influence of customer understanding skills competency on company performance

The performance of a *freight forwarding company* is the result of the company's overall work in achieving its goals, as an impact of the company's strategy and the extent to which a product produced by the company has achieved achievements (Rodrigue, 2020; Yadegari et al., 2019) . Company performance shows management skills in achieving its goals such as financial management, quality products and services, *stakeholder satisfaction* , long-term organizational survival by using the right strategies and action plans (Sawalha et al., 2013) . The performance of a *freight forwarding company* is directly determined by the management's ability to manage financial, operational and market-based performance (Kurniati & Nurcahyo, 2018) . Financial and operational performance dominates more in influencing company performance holistically compared to market-based performance in terms of *market value added*. Improvements in work productivity through improving service quality, on-time delivery, and fast response are preferred by customers to use the products and services offered (Jahanshahi et al., 2012) . This condition directly impacts the company's performance comprehensively.

A company that focuses on customers by listening, being friendly, and empathetic can boost company performance. *Customer service Freight forwarding* is required to have customer insight so that they can understand and comprehend the needs and behavior of their customers (Katuse, 2020; Lee & Song, 2018) . The results Hypothesis testing 1 (H1 ) shows that competency skills in understanding customers have an influence positive and significant in relation to company performance . Mark standard coefficient of efficiency is obtained as big as 0.407 , mark CR s e b e s a r 7.680, and si g nifi c a nsi 0.000 (  $p < 0.05$  ) . This positive and significant influence indicates a change in customer understanding skills competency that is significantly related to changes in

company performance. These results are in accordance with research conducted by Christopher (2011) , Vidovic *et al.* (2015) , Katuse (2020) , and Lee & Song (2018) .

However, this customer understanding skill competency is not strong enough to explain its influence on the performance of *freight forwarding companies* . In fact, this competency aims to improve the ability of *customer service* to predict future profits for the company and identify real market segmentation, based on data and information related to the volume and behavior of its customers (Christopher, 2011; Lee & Song, 2018; Wright et al., 2021b) . *Customer service freight forwarding* must be able to understand the characteristics of the customer's industry, know the commodities being transported, the goods handling system, know the documents and permits required related to government and international regulations that apply to the customer's industry . *Customer service freight forwarding* must also understand the beginning, end result, and continuation of the customer's supply chain operations, including who the suppliers are and who the customers of *the freight forwarder's customers* are .

## 2. *freight forwarding management skills competency on company performance*

*Freight forwarding management skills competency* greatly helps *customer service* in understanding and comprehending *freight forwarding products*, which include understanding transportation modes, customs handling, licensing, and others (Bowersox et al., 2020; Huang et al., 2019; Schramm , 2012; Zhang et al., 2021 ) . Results The H2 test shows that *b a h w a freight forwarding management skills competency b e r e p e n t e r* A positive and significant aspect is the performance of *freight forwarding companies* . Mark standard coefficient of efficiency is obtained as big as 0.369 , mark CR s e b e s a r 6.828, and si g nifi c a nsi 0.000 ( $p<0.05$  ) . Thus, there is a significant relationship or influence between *freight forwarding management skills competency* and company performance. This result is in accordance with the results of research conducted by Ngamvichaikit (2017) , Zhang *et al.* (2021) , and Nguyen (2021) .

The main function of *a freight forwarder* in multimodal transportation management is to offer, manage and develop multimodal transportation services. (Ngamvichaikit, 2017) . This skill is important for *customer service to have* in providing goods delivery services, including providing services for managing customer goods shipping permit documents in the customs process (Lee & Song, 2018; Purwoko & Maulina, 2019) . *Freight forwarding management skills* directly affect the company's operational performance, because *customer service's ability* to choose and order the right mode of transportation, negotiate prices and services, and organize the loading and unloading process at the port (Petrová, M., Krügerová, M. and Koziel, 2021; Schramm, 2012; Shang & Lu, 2012) . Operational performance will improve, especially those related to improving service quality, effective on-time delivery, short order lead times, and quick response to changes in market demand (Bae, 2017; Fiorello et al., 2023; Gu et al., 2023; Nanyam & Jha, 2022; Uddin, 2022)

## 3. *customer service management skills competency on company performance*

*Customer service management skills competencies* are more emphasized on skills in communicating with customers, negotiating, presenting company products and services, and

managing good administrative activities (Huang et al., 2019; Knapp, 2015; Sarder, 2021; Zhang et al., 2021). Results Testing H3 shows that that *customer service management skills competency* has an influence A positive and significant aspect is the performance of *freight forwarding companies*. Mark standard coefficient of efficiency is obtained as big as 0.272, mark CR s e b e s a r 5.211, and si g nifi c a n s i 0.000 ( $p < 0.05$ ). Thus, there is a significant relationship or influence between *customer service management skills competency* and company performance. This result is in accordance with the research conducted by Huang et al. (2019) and Melovic et al. (2015).

However, the communication, negotiation and administrative skills that a *customer service person has freight forwarding* is not strong enough to explain its influence on company performance. This is due to activities that are not in direct contact with customers, where the operational process is mostly carried out by the operational department. Marketing staff are even more active in communicating directly with customers to offer *freight forwarding* products and services owned by the company.

#### 4. The influence of stakeholder management skills competency on company performance

good *customer service* work system must be related to the organization's core business and its stakeholders. *Customer service* must be able to establish good relationships and manage all stakeholders directly related to the company, both internal and external parties, (Hinson et al., 2020; Miles, 2012; Ricardianto et al., 2022). Results Testing H4 shows that that the competency of stakeholder management skills has an influence A positive and significant aspect is the performance of *freight forwarding companies*. Mark standard coefficient of efficiency is obtained as big as 0.568, mark CR s e b e s a r 8.451, and si g nifi c a n s i 0.000 ( $p < 0.05$ ). Thus, there is a significant relationship or influence between the competence of stakeholder management skills of a company and company performance. This result is in accordance with the results of the research conducted (Hinson et al., 2020a; McGahan, 2021; Miles, 2012).

Every *freight forwarding customer service* has annual targets, so it is very important to know who the stakeholders are and how to manage them in order to achieve the goals set for *customer service*. Even though other parties outside of *customer service* are external and internal groups, departments or organizations, *customer service* is more about managing individuals or personnel. in the group that is directly related to *customer service* (Gizaw et al., 2021; Hinson et al., 2020a; Kivits, 2015; McGahan, 2021). This performance directly impacts company performance, where company performance is built on individual employee performance and holistic company management performance (Beigi et al., 2023; Intarapanich & Limpsurapong, 2019; Iqbal et al., 2019).

#### 5. customer service transaction elements on company performance

*customer service* transactions are a service activity *customer service*. This transaction element consists of from the pre- stage transactions, carried out before the transaction takes place, the transaction stage related to the physical distribution function, and post-transaction stage, in the form of post-transaction activities products (Christopher, 2011; Gizaw et al., 2021; Kułyk et

al , 2017; Schramm, 2012) . Results TEST H5 shows b a h w a elements of *customer service transactions* b e r e n g a spirit A positive and significant aspect is the performance of *freight forwarding companies* . Mark standard coefficient of efficiency is obtained as big as 0.160 , mark CR s e b e s a r 2.465, and si g nifi c a nsi 0.014 ( $p < 0.05$ ) . Thus, there is a significant relationship or influence between *customer service transaction elements and freight forwarding company performance* . These results are in accordance with the results of research conducted by Melovic *et al* . (2015) , Christopher (2011) , Gizaw *et al* . (2021) , Kulyk *et al* . (2017) , and Schramm (2012) .

*Customer service* transaction elements are closely related to operational activities, including setting order cycles and availability, product and service quality assurance, and handling customer complaints that impact the company's operational performance. The pre-transaction stage establishes shipping procedures or storage procedures for goods after *an order* is received, return procedures, and shipping methods so that consumers know what services they will receive . The pre-transaction stage also includes the service policy mechanisms that are enforced and communication channels based on the organizational structure. Elements during the transaction process regulate the delivery of goods to consumers, regulate inventory levels, and prepare transportation facilities . Post-transaction elements protect consumers from defective products, provide returns, guarantee re-acceptance, provide warranties, and handle consumer complaints (Christopher, 2011; Kulyk *et al* . , 2017; Schramm, 2012) . Company performance is assessed based on service quality, on-time delivery, and fast response including short waiting times when unloading/transporting cargo at the port.

## 6. The influence of customer understanding skills competency on *customer service transaction elements*

Results TEST H6 shows that competency skills in understanding customers have an influence The positive and significant aspects relate to *customer service transaction elements* . Mark standard coefficient of efficiency is obtained as big as 0.271 , mark CR s e b e s a r 4.333, and si g nifi c a nsi 0.000 ( $p < 0.05$ ) . Thus, there is a positive and significant influence between the competence of customer understanding skills and customer service transaction elements . *There is also a significant change or variability in the competence of customer understanding skills that is related to significant changes or variability in customer service transaction elements* . This result is in accordance with the results of research conducted by Hinson *et al* . (2020b) , Christopher (2011) , and Wright *et al* (2021b) .

One of the elements in pre-transaction is understanding customer desires and translating them into service actions. Therefore, listening to customers, being friendly and empathetic in serving are the keys to success in carrying out *customer service transaction elements*. This element also includes a delivery system that can be adapted to customer needs, stock availability and identification of product locations after the transaction process, (Hinson *et al* . , 2020; Purwoko, 2019; Katuse, 2020) .

## 7. *freight forwarding management skills competency on customer service transaction elements*

Results TEST H7 shows bahwa *freight forwarding management skills competency* berpengaruh positif dan signifikan terhadap *customer service transaction elements*. Mark standard coefficient of efficiency is obtained as big as 0.362, mark CR sebesar 5.612, and significant 0.000 ( $p < 0.05$ ). Thus, there is a significant relationship or influence between *freight forwarding management skills competency and customer service transaction elements*. This result is in accordance with research conducted by Shang & Lu (2012), Bowersox *et al.* (2020), Huang *et al.* (2019), Schramm (2012), and Zhang *et al.* (2021).

*The freight forwarding management skills competency possessed by customer service greatly affects the level of effectiveness of the implementation of customer service transaction elements to customers.* This is related to its ability to handle transportation through the selected mode of transportation, customs handling, and export and import permits in the country of origin and destination country. The ability to control the activity of moving goods from one point to another from shipping in one or several locations at once has an impact on the effectiveness of *customer service transaction elements*. (Petrová, M., Krügerová, M. and Koziel, 2021; Purwoko & Maulina, 2019).

Due to the large number of export and import shipping documents, *customer service Freight forwarding* is required to understand applicable government and international regulations. These regulations relate to the customer's industry, international trade system, selection of transportation modes, customs processes, and the Incoterms system, in order to communicate with customers. All of these abilities are one of the competencies that must be possessed by a *customer service*, especially those working in *the freight forwarding industry sector*. (Huang *et al.*, 2019; Rodrigue, 2020; Anggorowati, 2018).

## 8. *customer service management skills competency on customer service transaction elements*

Results TEST H8 show that *customer service management skills competency* has an influence on *customer service transaction elements*. The positive and significant aspects relate to *customer service transaction elements*. Mark standard coefficient of efficiency is obtained as big as 0.326, mark CR is 4.816, and significance is 0.000 ( $p < 0.05$ ). Thus, there is a significant relationship or influence between the competence of *customer service management skills of a company and customer service transaction elements*. These results are in accordance with research conducted by Shang & Lu (2012) and Huang *et al.* (2019)s.

Understanding and implementing *customer service management* is one of the competencies that *customer service must have*, especially in *the freight forwarding sector*. In addition, skills in communication, negotiation, presentation, and administrative management are also needed. *Freight forwarding services* are very competitive and easily replaced by other logistics service providers, so *customer service* plays a very important role in maintaining interactions with customers (Huang *et al.*, 2019; Knapp, 2015; Zhang *et al.*, 2021). The quality

of the implementation of *customer service* transaction elements is greatly influenced by the competence of *customer service* management skills . The three elements of the transaction are very much determined by the ability of a customer service in communicating, negotiating, presenting, and managing good administration. A *customer service* must be able to establish relationships with customers, especially related to the activities of sending and receiving goods at the port of origin until they reach the recipient.

### 9. The influence of stakeholder management skills competency on *customer service transaction elements*

Results TEST H9 shows that the competency of stakeholder management skills has an influence. The positive and significant aspects relate to *customer service* transaction elements . Mark standard coefficient of efficiency is obtained as big as 0.486 , mark CR s e b e s a r 7.263, and si g nifi c a n s i 0.000 ( $p < 0.05$ ) . Thus , there is a significant relationship or influence between the competency of stakeholder management skills of a company and *customer service transaction elements* . These results are in accordance with research conducted by Oshri *et al.* (2015) , Hinson *et al.* (2020b) , and Ricardianto *et al.* (2022) .

In carrying out the three elements of logistics transactions , *customer service* is in contact with all parties, both external and internal . Therefore, *customer service* needs to have the skills to manage all parties or stakeholders well , especially those related to the company's business. (Ricardianto *et al.* , 2022; Freeman, 2015; Gizaw *et al.* , 2021) . The competency of *stakeholder management* skills possessed by a *customer service* has a direct impact on the effectiveness of the implementation of the three transaction elements. Understanding in managing interests and establishing good relationships with *stakeholders* (management, employees, *shareholders* , suppliers and customers) has an impact on the effectiveness of the implementation of the three transaction elements.

### D. Conclusion

The results of this dissertation research obtained determinants that can affect the performance of *freight forwarding sector companies* . Customer understanding skills competency has a significant effect on company performance. Increasing work productivity through improving service quality such as on-time delivery and fast response is preferred by customers. This encourages customers to continue using the products and services offered. *Freight forwarding* company *customer service* is encouraged to interact more actively with its customers in order to better understand customers. *Freight forwarding* management skills competency has a significant effect on company performance. This is due to an increase in the company's operational performance, especially related to improving service quality, effectiveness of on-time delivery, and fast response to changes in market demand. From the respondent's background, generally those who have previous operational experience will better understand the *freight forwarding work process*. *Customer service* management skills competency has a significant effect on company performance. Compared to *customer service* , marketing staff are more active in communicating

directly with customers to offer *freight forwarding products and services*. Managing *stakeholders* has a significant impact on company performance, where this performance directly impacts the company's holistic performance which is built on the performance of individual employees. *Customer service techniques and skills* need to be continuously provided in the form of training and mentoring from superiors. Stakeholder management skills competency has a significant impact on company performance. *Customer service* is required to be able to interact with stakeholders in their work scope, both internal and external, so that *customer service* can provide good performance for achieving company targets.

The side that affects the company's performance, but indirectly strengthens the main factors above is the implementation of *customer service transaction elements*. This *customer service* transaction element has a significant effect on the performance of the *freight forwarding company*. Competence in customer understanding skills has a significant effect on the implementation of the three elements of *customer service transactions*. Likewise, the competence of *freight forwarding management skills* that help *customer service* in carrying out *freight forwarding* operational activities effectively. Competence in *customer service management skills* and *stakeholder management* also have an impact on the effectiveness of *customer service* performance in carrying out the three elements of *freight forwarding customer service* transactions.

## E. References

- ALFI. (2023). *Member Directory*. ALFI. [https://ilfa.or.id/dpw/new/member\\_directory.php](https://ilfa.or.id/dpw/new/member_directory.php)
- Anggorowati, A. (2018). *The evaluation of freight forwarding business existences*. 147(Grost 2017), 714–726. <https://doi.org/10.2991/grost-17.2018.62>
- Anggraini, E., Yuni, R. D., Cecilia, J., & Sitorus, Y. S. E. (2016). *Manajemen Transportasi Barang*.
- Ariani, D., & Dwiyanto, B. M. (2013). Analisis pengaruh supply chain management terhadap kinerja perusahaan (Studi pada industri kecil dan menengah makanan olahan khas Padang Sumatera Barat). *Diponegoro Journal of Management*, 2, No 3(2), 1–10.
- Baden-Fuller, C., & Teece, D. J. (2020). Market sensing, dynamic capability, and competitive dynamics. *Industrial Marketing Management*, 89(November), 105–106. <https://doi.org/10.1016/j.indmarman.2019.11.008>
- Bae, H. S. (2017). Empirical Relationships of Perceived Environmental Uncertainty, Supply Chain Collaboration and Operational Performance: Analyses of Direct, Indirect and Total Effects. *Asian Journal of Shipping and Logistics*, 33(4), 263–272. <https://doi.org/10.1016/j.ajsl.2017.12.010>
- Bak, O. (2018). Supply chain risk management research agenda – from a literature review to a call for future research directions. *Business Process Management Journal*, 37.
- Beigi, S., Malekakhlagh, E., Nosratpanah, R., & Safari, M. (2023). A Framework for Firm Performance Under the Influence of Knowledge Management and Dynamic Capabilities: Examining the Mediating Role of Sustainable Competitive Advantage. *Iranian Journal of Management Studies*, 16(1), 205–227. <https://doi.org/10.22059/IJMS.2022.327941.674674>

- Beysenbaev, R., & Dus, Y. (2020). Proposals for improving the Logistics Performance Index. *Asian Journal of Shipping and Logistics*, 36(1), 34–42. <https://doi.org/10.1016/j.ajsl.2019.10.001>
- Bowersox, D., Closs, D., & Cooper, M. B. (2020). *Supply Chain Logistics Management* (5th ed.). McGraw Hill Education.
- BPS. (2023). *Berita Resmi Statistik*. <https://www.bps.go.id/pressrelease/2023/02/15/1962/ekspor-januari-2023-mencapai-us-22-31-miliar--turun-6-36--persen-dibanding-desember-2022-dan-impor-januari-2023-senilai-us-18-44-miliar--turun-7-15-persen-dibanding-desember-2022.html>
- Chang, C., & Thai, V. V. (2016). *Do port security quality and service quality influence customer satisfaction and loyalty ?* 8839(March). <https://doi.org/10.1080/03088839.2016.1151086>
- Chopra, V. S., & Peter Meind. (2002). *Supply Chain Management : Strategy , Planning , and Operation / Supply Chains to Virtual Integra*.
- Christopher, M. (2011). *Logistics & Supply Chain Management* (4th ed.). Pearson UK.
- Ciechomski, W., & Strojny, S. (2022). Standardisation of logistics customer service. *European Research Studies Journal*, XXV(Issue 2B), 347–358. <https://doi.org/10.35808/ersj/2967>
- Civelek, M. E., Çemberci, M., & Çelebi, Ü. (2015). The mediator effect of Foreign Direct Investments on the Relation Between Logistics Performance and Economic Growth. *Journal of Global Strategic Management*, 1(9), 17–17. <https://doi.org/10.20460/jgsm.2015915624>
- Čižiuniene, K., Vaičiute, K., & Batarliene, N. (2016). Research on competencies of human resources in transport sector: Lithuanian case study. *Procedia Engineering*, 134, 336–343. <https://doi.org/10.1016/j.proeng.2016.01.016>
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). The McGraw-Hill Irwin.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Farmania, A., Felix, & Alfredo, L. (2021). The importance of human resources management to the supply chain management. *IOP Conference Series: Earth and Environmental Science*, 704(1). <https://doi.org/10.1088/1755-1315/704/1/012024>
- Fiorello, M., Gladysz, B., Corti, D., Wybraniak-Kujawa, M., Ejsmont, K., & Sorlini, M. (2023). Towards a smart lean green production paradigm to improve operational performance. *Journal of Cleaner Production*, 413(April), 137418. <https://doi.org/10.1016/j.jclepro.2023.137418>
- Gil-Saura, I., Berenguer-Contrí, G., & Ruiz-Molina, M. E. (2018). Satisfaction and loyalty in B2B relationships in the freight forwarding industry: Adding perceived value and service quality into equation. *Transport*, 33(5), 1184–1195. <https://doi.org/10.3846/transport.2018.6648>
- Gizaw, T., Bogale, M., & Gudeta, T. (2021). Investigating the efect of pharmaceutical logistics service performance on customer satisfaction: a two step approach with structural equation modelling. *Journal of Pharmaceutical Policy and Practice*. <https://doi.org/10.1186/s40545->

021-00351-6

- Grzeskowiak, A., Kwiatkowska-Ciotucha, D., & Zaluska, U. (2022). Competencies of logistics employees. Students' perspective. *Wir.Ue.Wroc.Pl*, 10448–10453. [https://www.wir.ue.wroc.pl/docstore/download/UEWRbc742d5939eb4d9a8500228d07db4a52/Grzeskowiak\\_A\\_Kwiatkowska-Ciotucha\\_D\\_Zaluska\\_U\\_Competencies\\_of\\_Logistics.pdf](https://www.wir.ue.wroc.pl/docstore/download/UEWRbc742d5939eb4d9a8500228d07db4a52/Grzeskowiak_A_Kwiatkowska-Ciotucha_D_Zaluska_U_Competencies_of_Logistics.pdf)
- Gu, M., Zhang, Y., Li, D., & Huo, B. (2023). The effect of high-involvement human resource management practices on supply chain resilience and operational performance. *Journal of Management Science and Engineering*, 8(2), 176–190. <https://doi.org/10.1016/j.jmse.2022.12.001>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When To Use And How To Report The Results Of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Hamed, M. M. (2019). Logistics performance and freight sector in Jordan. In *European Journal of Scientific Research*. researchgate.net. [https://www.researchgate.net/profile/Mohammad-Hamed-2/publication/332862010\\_Logistics\\_Performance\\_and\\_Freight\\_Sector\\_in\\_Jordan/links/5cc d8ffe458515712e911b24/Logistics-Performance-and-Freight-Sector-in-Jordan.pdf](https://www.researchgate.net/profile/Mohammad-Hamed-2/publication/332862010_Logistics_Performance_and_Freight_Sector_in_Jordan/links/5cc d8ffe458515712e911b24/Logistics-Performance-and-Freight-Sector-in-Jordan.pdf)
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/10.1111/joms.12639>
- Hinson, R. E., Adeola, O., Lituchy, T. R., & Amartey, A. F. O. (2020a). Customer Service Management in Africa. In □□□□ □□□□□ □□□□□□□ (Vol. 1999, Issue December). Taylor & Francis.
- Hinson, R. E., Adeola, O., Lituchy, T. R., & Amartey, A. F. O. (2020b). *Customer Service Management in Africa - a strategic and operational perspective*. Routledge Taylor and Francis.
- Huang, S. T., Bulut, E., & Duru, O. (2019). Service quality evaluation of international freight forwarders: an empirical research in East Asia. *Journal of Shipping and Trade*, 4(1). <https://doi.org/10.1186/s41072-019-0053-6>
- Intarapanich, K., & Limpsurapong, C. (2019). *Dynamic Technology Capabilities , Knowledge Management Process Excellence , and Firm Performance : From E-Commerce Businesses in*. 277–283.
- Iqbal, A., Latif, F., Marimon, F., Sahibzada, U. F., & Hussain, S. (2019). From knowledge management to organizational performance: Modelling the mediating role of innovation and intellectual capital in higher education. *Journal of Enterprise Information Management*, 32(1), 36–59. <https://doi.org/10.1108/JEIM-04-2018-0083>
- Iskandar, T. M., Sari, R. N., Mohd-Sanusi, Z., & Anugerah, R. (2012). Enhancing auditors' performance: The importance of motivational factors and the mediation effect of effort. *Managerial Auditing Journal*, 27(5), 462–476. <https://doi.org/10.1108/02686901211227959>

- Jahanshahi, A. A., Rezaei, M., Nawaser, K., Ranjbar, V., & Pitamber, B. K. (2012). Analyzing the effects of electronic commerce on organizational performance: Evidence from small and medium enterprises. *African Journal of Business Management*, 6(22), 6486–6496. <https://doi.org/10.5897/ajbm11.1768>
- Kadlubek, M. (2020). Post-transaction Phase of Logistics Customer Service in the Management of Companies Providing Transport Services. *European Research Studies Journal*, XXIII(Issue 4), 1035–1046. <https://doi.org/10.35808/ersj/1730>
- Kadłubek, M., Thalassinou, E., Noja, G. G., & Cristea, M. (2022). Logistics Customer Service and Sustainability-Focused Freight Transport Practices of Enterprises: Joint Influence of Organizational Competencies and Competitiveness. *Journal of Green Economy and Low-Carbon Development*, 1(1), 2–15. <https://doi.org/10.56578/jgelcd010102>
- Karingithi, et al (2020). (2013). Strategy typology, organizational factors and performance of freight forwarding companies in Kenya. *DBA Africa Management Review*, 3(1), 103–117. <http://journals.uonbi.ac.ke/damr/article/view/1090>
- Katuse, P. (2020). Customer service systems. In *Customer Service Management in Africa: A Strategic and Operational Perspective* (pp. 89–105). Productivity Press. <https://doi.org/10.4324/9780429031342-10>
- Kemenkeu. (2023). *Berdampak pada Daya Saing, Berikut Tantangan Sektor Logistik di Indonesia*. Kemenkeu. <https://www.kemenkeu.go.id/informasi-publik/publikasi/berita-utama/Tantangan-Sektor-Logistik-di-Indonesia>
- Kivits, R. A. (2015). Three component stakeholder analysis. *International Journal of Multiple Research Approaches*, 5(3), 318–333. <https://doi.org/10.5172/mra.2011.5.3.318>
- Knapp, D. (2015). *A guide to customer service skills for the service desk professional* (D. Knapp (ed.); 4th ed.). Cengage Learning.
- Kourounioti, I., Polydoropoulou, A., & Tsiklidis, C. (2016). Development of Models Predicting Dwell Time of Import Containers in Port Container Terminals - An Artificial Neural Networks Application. *Transportation Research Procedia*, 14, 243–252. <https://doi.org/10.1016/j.trpro.2016.05.061>
- Kułyk, P., Michałowska, M., & Kotylak, S. (2017). Assessment of customer satisfaction with logistics service in the light of the results of the research. *Management*, 21(1), 205–222. <https://doi.org/10.1515/manment-2015-0089>
- Kurniati, A., & Nurcahyo, R. (2018). Business strategy with uncertainty and performance in freight forwarding industry. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2018-March(1984), 1856–1860.
- Lee, E. S., & Song, D. W. (2018). Knowledge management in freight forwarding as a logistics intermediary: model and effectiveness. *Knowledge Management Research and Practice*, 16(4), 488–497. <https://doi.org/10.1080/14778238.2018.1475848>
- Lin, C. C., & Chang, C. H. (2018). Evaluating skill requirement for logistics operation practitioners: based on the perceptions of logistics service providers and academics in Taiwan. *Asian Journal of Shipping and Logistics*, 34(4), 328–336.

- <https://doi.org/10.1016/j.ajsl.2018.12.006>
- Lucas, R. W. (2014). Customer Service Skills for Success. In *Paper Knowledge . Toward a Media History of Documents* (Vol. 7, Issue 2).
- McGahan, A. M. (2021). Integrating Insights From the Resource-Based View of the Firm Into the New Stakeholder Theory. *Journal of Management*, 47(7), 1734–1756. <https://doi.org/10.1177/0149206320987282>
- Meldiana, M. R., & Rahadi, D. R. (2020). Peran customer service dalam mendukung kompetensi pegawai pada perusahaan. *JIMEA : Jurnal Ilmiah MEA*, 4(3), 1567–1581.
- Melović, B., Mitrović, S., Djokaj, A., & Vatin, N. (2015). Logistics in the function of customer service-Relevance for the engineering management. *Procedia Engineering*, 117(1), 802–807. <https://doi.org/10.1016/j.proeng.2015.08.255>
- Miles, J. A. (2012). *Management and Organization Theory* (1st ed.). A Jossey Bass Reader.
- Nanyam, V., & Jha, K. N. (2022). Operational performance model for Indian container terminals using qualitative comparative analysis. In *The Asian Journal of Shipping and Logistics*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S2092521222000268>
- Natto, H. (2014). Wal-Mart supply chain management.“. *International Journal of Scientific & Engineering Research*, 5(1), 1023–1026.
- Ngamvichaikit, A. (2017). The competency development of multimodal transportation management for logistics professional in Thailand. *International Journal of Trade, Economics and Finance*, 8(1), 62–66. <https://doi.org/10.18178/ijtef.2017.8.1.540>
- Nguyen, T. (2021). *Improving Competence of Logistics Services of Vietnamese Freight Forwarding Companies Post EU-Vietnam Free Trade Agreement Period*. <https://www.theseus.fi/handle/10024/499682>
- Nurwahyudi, N., & Rimawan, E. (2021). Analysis of customer satisfaction in freight forwarder industry using Servqual, IPA and FMEA methods. *Pomorstvo*. <https://hrcak.srce.hr/clanak/377132>
- Oshri, I., Kotlarsky, J., & Willcocks, L. P. (2015). *The Handbook of Global Outsourcing and Offshoring The Definitive Guide to Strategy and Operations* (3rd ed.). Palgrave Macmillan.
- Petrová, M., Krügerová, M. and Koziel, M. (2021). Incoterms – history and future development. *Proceedings of the 15th International Conference Liberec Economic Forum*, 589–598. <https://www.researchgate.net/publication/355585166>
- Pratama, S. A., & Permatasari, R. I. (2021). Pengaruh penerapan standar operasional prosedur dan kompetensi terhadap produktivitas kerja karyawan divisi ekspor PT. Dua Kuda Indonesia. *Jurnal Ilmiah M-Progress*, 11(1), 38–47. <https://journal.universitassuryadarma.ac.id/index.php/ilmiahm-progress/article/view/600>
- Purwoko, H., & Maulina, A. (2019). Import clearance planning study at Tanjung Priok Port-Jakarta. *Jurnal Manajemen Transportasi & Logistik*, 06(03), 269–277. <https://doi.org/10.25292/j.mtl.v6i3.334>
- Purwoko, H., Nugroho, S. T., & Amalia, A. R. (2019). Kesiapan moda transportasi dan perencanaan muatan terhadap kelancaran distribusi CBU (Completely Build Up). *Jurnal*

- Manajemen Bisnis Transportasi Dan Logistik (JMBTL)*, 5(3), 419–426.  
<http://library.itltrisakti.ac.id/jurnal/index.php/JMBTL/article/view/229>
- Purwoko, H., Wahyuni, R. E., Purba, O. R., & Rahman, H. M. (2023). Analisis keterlambatan pengadaan bahan baku dalam upaya meningkatkan target kinerja impor PT. Clariant Indonesia. *Gorontalo Management Research*, 6(1), 7.
- Redmond, T., & Nasir, M. A. (2020). Role of natural resource abundance, international trade and financial development in the economic development of selected countries. *Resources Policy*, 66(February), 101591. <https://doi.org/10.1016/j.resourpol.2020.101591>
- Ricardianto, P., Barata, F. A., Mardiyani, S., Setiawan, E. B., Subagyo, H., Saribanon, E., & Endri, E. (2022). Supply chain management evaluation in the oil and industry natural gas using SCOR model. *Uncertain Supply Chain Management*, 10(3), 797–806.  
<https://doi.org/10.5267/j.uscm.2022.4.001>
- Rodrigue, J.-P. (2020). *The Geography of Transport System* (Jean-Paul Rodrigue (ed.); 5th ed.). Routledge. <https://transportgeography.org/>
- Russ-Eft, D. (2014). Customer service competencies: A global look. *Human Resource Development International*, 7(2), 211–231. <https://doi.org/10.1080/1367886042000243808>
- Sadri, P. D. A., Dewi, P. A. G. K., & Darmayanti, N. L. (2021). Analisis kebutuhan kompetensi SDM bidang logistik dengan metoda analytical hierarchy process. *Jurnal Teknologi Transportasi Dan Logistik*, 2(2), 97–106. <https://doi.org/10.52920/jttl.v2i2.25>
- Sarder, M. (2021). Logistics customer services. *Elsevier Public Health Emergency Collection*.  
<https://doi.org/10.1016/B978-0-12-815974-3.00008-3>
- Sawalha, I. H. S., Jraisat, L. E., & Al-Qudah, K. A. M. (2013). Crisis and disaster management in Jordanian hotels: Practices and cultural considerations. *Disaster Prevention and Management: An International Journal*, 22(3), 210–228. <https://doi.org/10.1108/DPM-09-2012-0101>
- Schramm, H.-J. (2012). *Freight forwarders intermediary role in multimodal transport chains a social network approach* (H.-J. Schramm (ed.)). Springer Heidelberg Dordrecht.
- Senna, R. A., Mukti, E. T., & Suyono, R. S. (2020). Penataan Manajemen Lalu Lintas Jalan Supadio Dan Jalan Mayor Aliyang Kubu Raya Akibat Pembangunan Kawasan Komersial Terpadu bumi Raya City. *Jurnal Mahasiswa Teknik Sipil ...*, 1–10.  
<https://jurnal.untan.ac.id/index.php/JMHMS/article/view/42516>
- Shang, K. C., & Lu, C. S. (2012). Customer relationship management and firm performance: An empirical study of freight forwarder services. *Journal of Marine Science and Technology*, 20(1), 64–72. <https://doi.org/10.51400/2709-6998.2423>
- Skiba, S., & Karas, A. (2022). The changing role of a freight forwarder in modern supply chains. *European Research Studies Journal*, XXV(Issue 1), 341–351.  
<https://doi.org/10.35808/ersj/2856>
- Sumantri, A. S., & Nugrahanto, R. (2018). Pengaruh Jasa Pelayanan Freight Forwarding Terhadap Kepuasan Pelanggan. *Jurnal Sains Dan Teknologi Maritim*, XVIII(1), 51–64.  
<https://doi.org/10.33556/jstm.v0i1.186>

- Sunyoto, Y., Ghozali, I., & Purwanto, A. (2018). *Analysis of auditor performance by using covariance based structural equation modelling: a study of public accounting firms in Indonesia*.
- Uddin, M. B. (2022). The effect of strategic commitment and supply chain collaboration on operational and innovation performance. *IIMB Management Review*, 34(4), 364–377. <https://doi.org/10.1016/j.iimb.2022.12.002>
- Vidovic, M., Kilibarda, M., Zecevic, S., Miljus, M., & Radivojevic, G. (2015). *Proceedings of the 2nd Logistics International Conference*. 366.
- Wahyono, & Hutahayan, B. (2021). The relationships between market orientation, learning orientation, financial literacy, on the knowledge competence, innovation, and performance of small and medium textile industries in Java and Bali. *Asia Pacific Management Review*, 26(1), 39–46. <https://doi.org/10.1016/j.apmr.2020.07.001>
- Wati, A. W. (2018). Peranan Freight Forwarder Dalam Menunjang Aktivitas Ekspor Antar Negara Melalui Jalur Laut Dan Udara. *Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 7(1), 2909–2928. <http://journal.ubaya.ac.id/index.php/jimus/article/view/2443/1927>
- World-Bank. (2023). *Connecting to Compete*. [ipi.worldbank.org](http://ipi.worldbank.org)
- World Bank. (2015). Improving Indonesia's Freight Logistics System: A Plan of Action. *Report No : AUS5940 Republic of Indonesia Improving National Freight Logistics, World Bank Group*, 38.
- Wright, L. T., Moutinho, L., Stone, M., & Bagozzi, R. P. (2021a). The routledge companion to creativity. In R. P. B. Len Tiu Wright, Luiz Moutinho, Merlin Stone (Ed.), *The Routledge Companion to Creativity*. Routledge Taylor and Francis.
- Wright, L. T., Moutinho, L., Stone, M., & Bagozzi, R. P. (2021b). *The Routledge Companion to Marketing Research*. Routledge Taylor and Francis.
- XU, L., XU, Q., & LIU, X. (2014). Wal-Mart and Carrefour's Supply Chain Management Strategies in China. *International Journal of Business and Management*, 9(7), 155–161. <https://doi.org/10.5539/ijbm.v9n7p155>
- Yadegari, R., Rahmani, K., & Khiyabani, F. M. (2019). Providing a comprehensive model to measure the performance dimensions of industrial clusters using the hybrid approach of Q-factor analysis and cluster analysis. *International Journal for Quality Research*, 13(1), 235–248. <https://doi.org/10.24874/IJQR13.01-14>
- Yang, B., & Xue, J. (2020). Analysis of factors affecting the stickiness of freight forwarders based on customer experience. *American Journal of Industrial and Business Management*, 10(02), 389–401. <https://doi.org/10.4236/ajibm.2020.102025>
- Zhang, L., Zhan, Y., Wang, Z., & Xiao, M. (2021). Research on the dilemma and countermeasures of the customer service management of international freight forwarders under the new normal - - Take Guangdong GW company as an example. *E3S Web of Conferences*, 253, 0–4. <https://doi.org/10.1051/e3sconf/202125302062>
- Zinovieva, C. G., & et.al. (2016). Study of external and internal factors affecting enterprise's stability. *Advances in Systems Science and Applications*, 16(1), 62–71.

<https://ijassa.ipu.ru/index.php/ijassa/article/view/357>