

## THE IMPACT OF COVID-19 ON WORK PRODUCTIVITY AND THE EXPORT FREIGHT SHIPMENT AT PT EXPEDITORS INDONESIA

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**Abstract.** Freight forwarder is a type of delivery-service that includes the undertaking of sending and receiving cargo by air, sea, and land. Nowadays, a lot of freight forwarding companies are struggling to achieve ends meet in accord with the recent outbreak of Covid-19. In an organization such as a company, human resources play an important role to achieve company goals and employee productivity. The performance of human resources often defines a company's capability. Several issues that emerged in these pandemic times, such as the declining export orders. This issue directly effects employee's productivity because of the scarce work task and the different work environments due to regulations.

Keywords: Employee's performance, Productivity, Freight Forwarder, Export, Human Resource

### Introduction

The globalization era has brought along rapid development of the delivery business, including the freight forwarder business that does delivery via air, sea, and land. Currently, the freight forwarder business in Indonesia is going strong. Many businessmen are starting on treading this line of business, realizing the considerable profit involved.

Gopal R, Global Vice President of Transportation & Logistics Practice Frost and Sullivan states that the profit gained through the business rose around 15,4% throughout the year of 2015 to 2020. The rise in profit was caused by the rate of manufacture products exported in international trade especially involving the ASEAN Economic Community. The bloom of infrastructure development also played a significant factor to stimulate investments. Source : (Riset: 2020, Industri Logistik Indonesia Tumbuh 15, 2020)

Unfortunately, many freight forwarder companies that just start to branch out are struggling since the spread of the Covid-19. This causes competition among these companies to be arduous and troubling. The number of goods transported from the main harbor weights 2,084,000 tons in January 2020 and it decreased by 789,915 tons compared to December 2019. There were 562,122 tons of goods that were transported in February 2020. It increased by 478,122 tons compared to January 2020. There were also 2,505,838 tons of goods that were transported in March 2020 and it decreased by 56,274 tons compared to February 2020. 2,475,455 tons of goods were transported in April and it decreased by 30,393 tons if compared to March 2020. Source : (FENOMENA EKONOMI DAN PERDAGANGAN INDONESIA DI MASA PANDEMI CORONA VIRUS DISEASE-19 ( COVID-19 ), 2020)

The company is demanded to optimize every resource available in facing global competition. Human resources has an important role to achieve company goals. Human resources is the driving force in a company that manage every little component needed and it is just like how a carpenter builds a table using several components such as bolts, hammer, wood, etc. This shows that excellent human resources management is urgently required to achieve company goals and employee productivity. The human element is crucial in determining the success of a company because an employee possesses thoughts, feelings, needs, and hopes that demand individual consideration and those components might effect work-performance, loyalty, and productivity. Source : (The influence of discipline, motivation, and working spirit on employee, 2015)

The availability of human resources that possesses certain qualities is an important asset for a freight forwarder company for they have important role as the intermediary between the owner, carrier, and receiver. Human resources management becomes a mandatory since there is the fierce competition among companies. When a company manages various resources, a capable human resources is required. At the beginning of 2020, the Covid-19 outbreak has forced many companies to manage their human resources efficiently.

This virus was first found in an animal and seafood market in the city of Wuhan. Health and Science Correspondent BBC, Michelle Roberts and James Gallagher said that the virus spreads from animal to human and human to human. They suspect that animal infects humans at the market where such an environment contains many animals, live and as carcasses are found such as snake, bat, and chicken. The number of infected is still increasing, even many health workers are now infected by the virus. In the end, research confirms that the transmission of pneumonia spreads from human to human (Relman, 2020). An isolated sample from a patient was reactive to betacoronavirus a sub-type of the coronavirus in 2019 which was then called novel Coronavirus (2019-nCov). February 11th, 2020 it marked the start of many public activity restrictions which are only applicable to several select areas that are suspected of hosting infected residents. A substantial amount of schools, universities, and company activities are called off by the government and replaced with online activities. Religious activities, transportation, public place, and the sealing of many workplaces are also restricted especially those that are connected with civil defense and security. With the Covid-19 outbreak, many companies are reducing their workforce by applying work termination on employees as a counter measure to a company's worsening economic state. A company requires to keep stable their employees work productivity even they are forced to work from home. Some employees might feel decreasing their level of work productivity caused by a differing work environment or a reduced salary as part of the regulation. Some companies might also be doing a fine job of keeping the prosperity of their human resources.

Work termination is a last-resort kept by a company to save their economic state which worsens in these pandemic times that directly affects many business sectors. A lot of businesses are experiencing economic crises that threaten their operation and health. This situation holds true especially on small-scale businesses.

Some companies took several strategic procedures to adapt and kept their business stable in order to minimize their losses. According to ILO (International Labour Organization), the full or partial quarantine as a countermeasure against the virus has affected 2.7 billions of employees, which represents 81 percent of the world's workforce.

PT. Expeditors Indonesia Jakarta has adapted to these pandemic times even though export and import deliveries are on an all-time low. Several things are accounted for by PT. Expeditors Indonesia Jakarta and one of them is providing the best customer service by providing updates on the new regulation given by the governor of the destination area concerning Covid-19. On another note, PT. Expeditors Indonesia has implemented a consistent online working hour starting from 8.30 to 17.30 WIB. This is done in order to keep work productivity. Meanwhile, the document team is required to report on Monday and Thursday in order to deliver smooth sailing document processes that adhere to applicable procedures. Several problems that occurred during the outbreak include the decreasing work productivity due to scarce delivery orders. This happened as a response to the many problems with the application of Work From Home regulation. From the Document Team's perspective, there were a few late documents dispatched caused by a country's lockdown, and the rest were caused by a non-optimal delivery to several countries.

PT. Expeditors Indonesia Jakarta is one among many freight forwarder company that engaged in the field of delivery-service, export and import, via a well-managed work system and compromising of multiple branches. It is located at several strategic areas in which indirectly offers a solution to transportation dilemma to be a fast, successful, and accurate delivery company.

From data owned by PT. Expeditors Indonesia, it shows that there is a very significant decrease of export volume and orders from March up to May as it is shown in the following table.



Figure 1: Volume and Orders PT. Expeditors Indonesia  
Source: Author

1. Employee Performance  
(Kusuma et al., 2018) According to Kusuma, it is concluded that the definition of employee performance is a work performance achieved by an individual or a group in an organization qualitatively or quantitatively, as long as it abides by job related's authority, duty, and responsibility to achieve company's goals legally without breaking the law, ethics, and moral values adhered.
2. Work Productivity  
(Edy Sutrisno, 2015) Edy states that work productivity needs a change of behavior and mental attitude based on a better tomorrow than today's mentality. Productivity is an efficient way to measure work productivity. A comparison between input and output is that input is often limited by the workforce, while output is measured by physical, form, and value unit.
3. Freight Forwarder  
(Sutrisno & Saputro, 2018) Sutrisno and Saputro define Freight Forwarder (FF) as an agent or travel bureau for goods in which they assist exporter and importer in exporting and importing goods.
4. Export  
(Fauziah, 2018) Fauziah states that export is the activity of sending goods outside the border of the country of Indonesia or the pabean area outside of the territory of

Indonesia or the pabean area. Recently, the activity of goods export is based on Law no. 10 of 1995 which was renewed into Law no. 17 of 2006 concerning pabean.

5. Covid-19

(Iis Arischa, 2020) Coronavirus is a collection of virus that infects the respiratory system. A lot of corona cases show the following symptoms: mild respiratory infection system and flu. However, this virus can also cause severe respiratory infections like the following: lung infection (pneumonia), Middle-East Respiratory Syndrome (MERS), and Severe Acute Respiratory Syndrome (SARS).

**Method**

The following is the method used in the study:

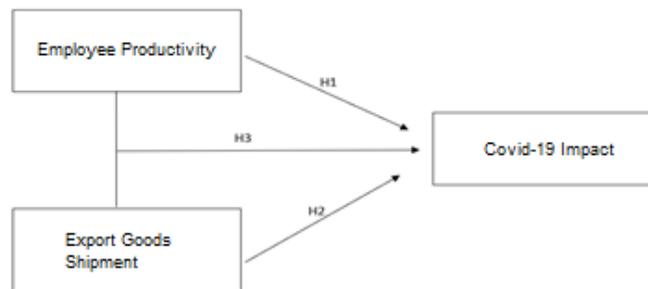


Figure 2: The Method

- H<sub>1</sub> : It is suspected that there is a significant influence between Work Productivity on the impact of Covid-19.
- H<sub>2</sub> : It is suspected that there is a significant influence between Export Goods Shipments on the impact of Covid-19.
- H<sub>3</sub> : It is suspected that there is a significant influence between Employee Productivity and Increasing of Freight Shipments on the impact of Covid-19.

In this study, the researcher applied the data collection techniques by providing questionnaires to employees in the Document Export division. The answers to each item of the instrument is assessed using a Likert scale that has the gradient of strongly agree to strongly disagree. The quantitative analysis has population of 35 employees of PT Expedito Indonesia's export document division who were willing to be sampled.

**Discussion and Results**

The followings are the results of the calculation on the data.

RESPONDENT CHARACTERISTIC		total	percentage
GENDER	FEMALE	18	51%
	MALE	17	49%
	TOTAL	35	100%
AGE	21-25	18	51%
	26-30	17	49%
	TOTAL	35	100%
PERIOD OF WORKING	1s/d 5	31	88%
	5 s/d 10	4	12%
	TOTAL	35	100%

Table 1: The respondent characteristics

Table 1 shows the respondents characteristics that they are 18 female and 17 male with the ranging age is from 21 to 30 years old. There are 18 respondents who are 21-25 years old and the rest of 18 respondents who are 26-30 years old. From the working period, it reveals that there are 31 respondents who have been working for 1-5 years and 4 respondents who have been

working for 5-10 years. From the table 1, it is concluded that most of the respondents have been working for 1 - 5 years.

The validity test used by the researcher is the Spearman’s Rho bivariate correlation test using SPSS version 26 for Windows. Validity test is calculated by comparing the value of  $r_{count}$  with the value of  $r_{table}$  at 5% level of error for degree of freedom (df) = n-2. The test results of the questionnaire are stated as valid if  $r_{count} > r_{table}$  Ghozali in the research (Prastiwi, 2018)

According to (Prof.Dr.Sugiyono, 2017), The reliability calculation applied is the Cronchbach’s alpha methods. The reliability test is referring to Cronchbach’s alpha, which reliability level reaches 0.840.

No	Variabel	Item	rcount	Cronbach alpha	$r_{tabel}$	Cronbach alpha standard	information
1	EMPLOYEE PRODUCTIVITY (X1)	X1.1	0,397	0,838	0,334	0,84	VALID
		X1.2	0,786		0,334	0,84	VALID
		X1.3	0,411		0,334	0,84	VALID
		X1.4	0,702		0,334	0,84	VALID
		X1.5	0,411		0,334	0,84	VALID
		X1.6	0,755		0,334	0,84	VALID
		X1.7	0,786		0,334	0,84	VALID
		X1.8	0,702		0,334	0,84	VALID
		X1.9	0,702		0,334	0,84	VALID
		X1.10	0,411		0,334	0,84	VALID
		X1.11	0,755		0,334	0,84	VALID
2	EXPORT GOODS SHIPMENT (X2)	X2.1	0,357	0,625	0,334	0,63	VALID
		X2.2	0,834		0,334	0,63	VALID
		X2.3	0,87		0,334	0,63	VALID
		X2.4	0,693		0,334	0,63	VALID
3	COVID-19 IMPACT(Y)	Y1	0,492	0,634	0,334	0,636	VALID
		Y2	0,698		0,334	0,636	VALID
		Y3	0,587		0,334	0,636	VALID
		Y4	0,537		0,334	0,636	VALID
		Y5	0,587		0,334	0,636	VALID
		Y6	0,671		0,334	0,636	VALID

Table 2: The result of the reliability test  
Source: Processed based on the questionnaire data results, 2020

The researcher distributes the questionnaires to 35 respondents so that the df is 35-2 or df is 33 with alpha (5% = 0.05), which makes the validity  $r_{table}$  0.334. Based on the  $r_{table}$ , the instrument is declared valid if  $r_{count} > 0.334$  and the instrument is invalid if  $r_{count} < 0.344$ . The reliability test results in table 2 shows that each variable produces an alpha value that exceeds the Cronbach’s alpha value of 0.84, 0.63, 0.636. Thus, it is concluded that the indicators and questionnaires are credible or consistent.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.597	.897		1.780	.084
	Work Productivity	.505	.023	.968	22.270	.000

Table 3: The analysis of Work Productivity towards Covid-19  
Simple Linear Regression of Work Productivity Variables towards Covid-19

The table 3 is the simple linear regression of work productivity variables towards Covid-19 and the data is processes by using SPSS 26.00. It shows that:

Based on the results obtained from the regression coefficients aforementioned, a regression equation can be made to estimate the impact of Covid-19 which is influenced by work productivity. The simple linear regression equation implies that every 1 unit increase in the score of application of the variable work productivity is 0.505 will be followed by an increase in the impact of covid-19 by 1,597.

Model		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Sig.
		Unstandardized Coefficients B	Std. Error			
1	(Constant)	22.271	5.563		4.003	.001
	FREIGHT SHIPMENTS	.032	.390	.018	.082	.000

Table 4 : Simple Linear Regression of Export Freight Shipment Variables towards Covid-19 (Dependent Variable: y)

Based on the results obtained from the regression coefficients above, a regression equation can be made to estimate the impact of Covid-19 which is affected by a decrease in freight shipments.

The simple linear regression equation means that every 1 unit increases in the application score in the Freight Shipment variable as much as 0.032, and it is increased in the Covid-19 Impact as much as 22,271.

**MULTIPLE LINEAR**

The testing of the basic classical regression analysis requirements that are done gives the result that the variables involved in it has the qualifications of the classic requirements and assumptions by testing the significance of the model and interpretation of the regression model.

The multiple linear results can be seen from the table below :

**Table V**

Model		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Sig.
		Unstandardized Coefficients B	Std. Error			
1	(Constant)	1,140	.758		1,505	.142
	WORK PRODUCTIVIT Y (X <sub>1</sub> )	.763	.068	1,464	11,146	.000
	FREIGHT SHIPMENTS (X <sub>2</sub> )	.673	.172	.516	3,926	.000

Table 5: Multiple Linear Regression (Total Dependent Variable)

The multiple linear regression equation means that 1 unit score increases the Work Productivity variable of 0.763 and it is increased in the Covid-19 impact of 1,140 with the assumption that the Freight Shipment variable is in a fixed state. Every 1 unit increases in the application score on the decreasing in Freight Shipments variable of 0.673 then it is increased in the Covid-19

impact of 1,140 assuming that the Work Productivity variable is in a constant condition.

Partial hypothesis testing (*t* test) is intended to determine if there is any impact from the partially independent variables to the dependent variable. The results of the hypothesis in this test are as follows:

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1,140	.758		1,505	.142
	Work Productivity (X <sub>1</sub> )	.763	.068	1,464	11,146	.000
	Freight Shipments (X <sub>2</sub> )	.673	.172	.516	3,926	.000

Table 6: Significant Partial Test Results (*t* test)

a. Dependent Variable: TOTAL

$$t_{table} = 1.692$$

In table 6, the  $t_{count}$  for work productivity is 11,146 while the value of table is 1,692. It can be said that  $t_{count} 11.146 > t_{table} 1.692$  and the significant value of 0.000 is smaller than 0.05. Thus, the hypothesis states that there is a positive and significant effect between work productivity and the impact of Covid-19 ( $H_a$  is accepted and  $H_o$  is rejected). This means that partially, there is a positive and significant effect between work productivity and the impact of Covid-19.

The F Statistical Test explains if all independent variables included in the model have a simultaneous influence on the dependent or inputted variables. The F Statistical Test is used to fulfill all effects of the independent variables tested at a 5% significance level. The results of the simultaneous significant coefficient test can be seen in the following table:

Model		ANOVA <sup>a</sup>				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	255,183	2	127,591	363,981	.000 <sup>b</sup>
	Residual	11,217	32	.351		
	Total	266,400	34			

Table 7: Simultaneous significant test results (test f)

a. Dependent Variable: total

b. Predictors: (Constant), total X<sub>2</sub>, total X<sub>1</sub>

From table 7, it shows that If  $F_{count} > F_{table}$  and  $H_a$  is accepted. It means that the independent variable simultaneously has a significant effect on the independent variable. Based on the results of the SPSS calculation, it can be concluded that  $F_{count} > F_{table}$  ( $363,981 > 3,29$ ), so that  $H_o$  is rejected and  $H_a$  is accepted. The conclusion from the acceptance of  $H_a$  is that the value of the regression coefficient is not equal to zero meaning that the Work Productivity and Freight Shipment Variables significantly and simultaneously influence the Covid-19 Impact Variable.

The big influence on the impact of Covid-19 is Work Productivity which is the results of simulative significant testing (F)

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.979 <sup>a</sup>	.958	.955	.592

Table 8: Correlation Coefficient

a. Predictors: (Constant), total X<sub>2</sub>, total X<sub>1</sub>

b. Dependent Variable: Total

The coefficient of determination or ( $R^2$ ) is 0.955. This results explain that the independent variable, work productivity, has 95.5% of the dependent variable; that is the impact of Covid-19, while the remaining 4.5% is explained by other variables which are not included in this model.

### Conclusion

In short, there is a correlation between the impact of Covid-19 on employee work productivity and export freight shipments at PT Expeditor Indonesia. The most influential statement on the Work Productivity variable is employees complete their duties to keep the shipment process running. This statement is powerful because employees must continue to work to carry out operations in several other countries that can still receive export processes with new work procedures. In addition, the influential statement that the work environment at home supports work effectively causes some employees feel comfortable and safe when working at home in the midst of a pandemic.

In the Export Freight Shipment variable, the most influential statement is the employee knows if there is a cancellation of the shipment to the destination country and this statement is significant because the employee already knows that the cancellation of the shipment to the destination country will be hold. This important information will be passed on to the vendor in order to hold the freight from being sent to the warehouse.

In the Covid-19 Impact variable, the most influential statement is employees do not interact directly with coworkers and this is based on the fact that employees cannot coordinate directly, but they must still be able to maintain good communication with fellow colleagues about their works. PT Expeditors obliges that every email must be replied as soon as possible or no later than the last hour of operational work. Employees are accustomed to and must continue to have good cooperation between colleagues from the same division or other divisions.

From the aforementioned explanation, the results of this study are in line with studies that have partially and simultaneously yielded similarities in the previous research (Deanita Sari, 2020) that shows a decline in exports during the Covid-19 pandemic.

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