

# How can Corporate Performance Kept in Multinational Firm: a Study from Indonesia

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## Abstract

The purpose of this study is to know firm size, firm age and environmental management have any impact on corporate performance. The authors analyze the behavior of Unilever companies operating in Indonesia through the perceptions of users of Unilever products in maintaining corporate performance. The research design consists of comprehensive literature review, using a questionnaire to get a data from 195 respondents that work in Unilever Indonesia and then processed by Software STATA to validating and reliability of data. By the framework model that authors have been run regression. The conclusions from the research are, there is positive impact between firm size, firm age and environmental management on corporate performance in Unilever company. The results of this study prove that the increasing firm size, firm age, and environmental management will contribute to increased corporate management at a significant level of 10% in this study. as it is known that corporate performance is an important key for further business development in this company.

## Keywords

firm size; firm age; environmental management; corporate performance

## 1. Introduction

The goal of company can be achieved in the form of increasing profits or increasing the quality of the company to compete with its competitors (Budiono et al, 2021). However, to achieve this, sometimes the company does not pay attention to the surrounding environment where the company is only focused on increasing profits without seeing the environmental damage because of the strategy implemented by the company (Purba et al, 2020). Therefore, it is important for a company to implement a strategy that has been made as best as possible to improve the performance of the company itself (Adirinekso et al, 2020). In addition, company performance can increase depending on the company itself.

Unilever itself has been established since 1800, which was originally a very small family business formed because of a partnership. Initially this business was only trading in butter, which was carried out by the Jurgen Family. Then in 1870 when he was successful in the Dutch market, Van den Bergh expanded his business to England which was one of the largest markets for selling butter at that time. Along with the development of the times, until 1894 people started to get acquainted with cleanliness and hygiene. Lever brother finally created a new product known as

lifebuoy. Continued in 1899 Lever brother again invented a new product to help do homework easier, namely Sunlight flakes / Lux flakes.

Where Unilever itself is now considered as one of the largest companies in the world with products that can be found in various countries and are always used by many people, is one of the successes that Unilever has achieved (Budiono & Purba, 2019). Indonesia Unilever is very well known among the public, not only that Unilever itself is one of the companies with the nickname BIG Caps on the Indonesia Stock Exchange (Budiono et al, 2021). One of Unilever's own strengths is that it not only has many products that are continuously being developed, but Unilever also pays attention to the sustainability of the surrounding environment (Adirinekso et al, 2020). Unilever itself has a company goal, namely "the highest standards of corporate behavior towards everyone we work with, the communities we touch, and the environment on which we have an impact." also pay attention to the surrounding environment and its stakeholders (Purba et al, 2021).

Table 1. Progress of Net Sales and Total Asset of Unilever Indonesia.

(In Billion Rupiah)	2015	2016	2017	2018	2019
Net Sales	36,484	40,054	41,205	41,802	42,923
Total Asset	15,730	16,746	18,906	20,327	20,649

Source: www.unilever.com

During 2015 till 2019 in table 1, Unilever Indonesia can grow in net sales and total asset significantly. In 2019 Unilever's own net sales increase moderately, this could happen because there were sales targets that were not achieved at that time. Which is where it becomes a lesson for Unilever itself to be able to continue to innovate. Of course, with good cooperation from all existing divisions, it is believed that Unilever Indonesia can increase its revenue in the future (Purba et al, 2021). Unilever itself can be categorized as one of the old companies established in Indonesia.

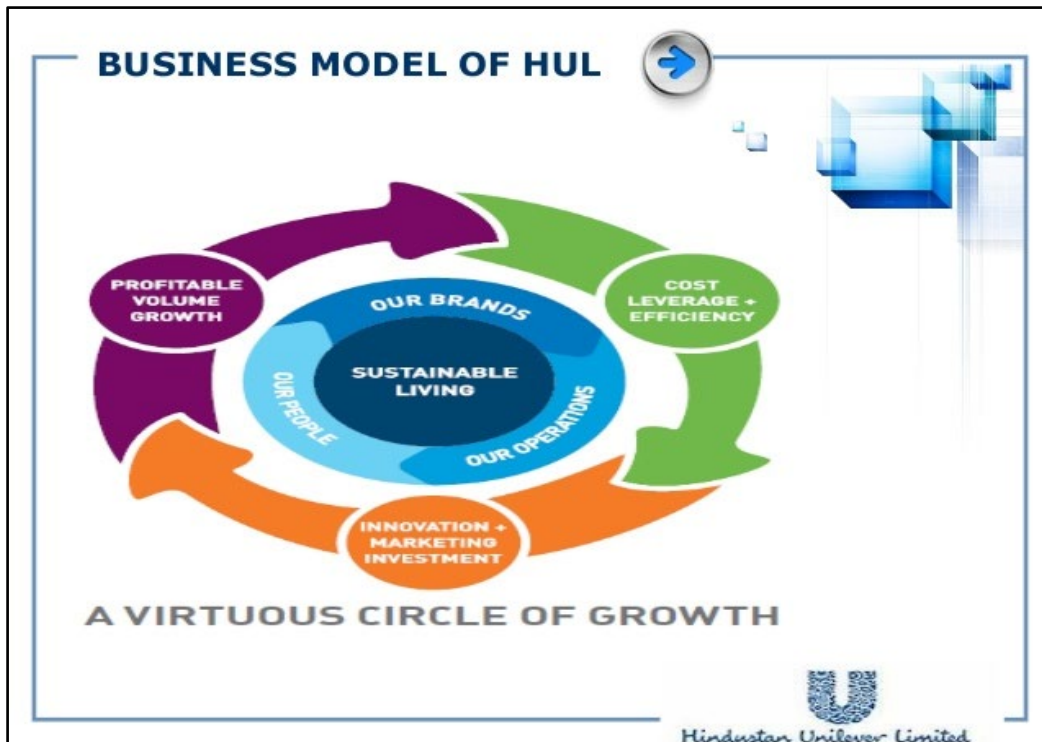


Figure 1. Business Model Hul Unilever  
 Source: Unilever.com

This figure 1 is a form of Unilever's own business model. In addition, Unilever's business model is one way to achieve sustainable value from every product produced. The first circle which contains (Brand, People and Operation) is the main core (the main driver) that Unilever is concerned about, whereas the outer circle (Innovation,

Cost Leverage, and Profitable) is an external factor that describes how Unilever Indonesia continues to strive to increase profits and revenue (Budiono et al, 2020).

Even though Unilever is known as one of the big companies and has an environmentally friendly image related to its recyclable products. However, in Unilever's history, Unilever has committed actions that damage the environment because of the activities of Unilever companies. The best known are palm oil issues that influence on Unilever Indonesia. Which is where this problem is caused because Unilever is a company that produces soap, detergents, cosmetics and almost all Unilever products need palm oil. Crude palm oil is obtained by purchasing from companies in Indonesia (Budiono & Purba, 2020).

However, company performance is measured based on capability and ability of an organization to efficiently utilize the available resources to achieve accomplishments consistent with the set objectives of the company, as well as considering their relevance to its users (Deesomsak, Paudyal, & Pescetto, 2004). Apart from other factors that can also have an impact on the company's operational performance or the performance of the company itself, it is based on the size and age of the company itself. Which in theory the age of the company is closely related to the size of the company itself (Richards, Yeoh, Chong, & Popović, 2019). Another theory states that the smaller and younger the company is, the easier it is for the company to develop compared to large and old companies (Rajagukguk et al, 2021).

Therefore, it can be concluded that there is a relationship between the size and age of a company on the operational performance of a company and the performance of the company itself. In addition to the age and size of the company, there are other factors that can affect the performance of a company, this factor is the environmental management system (Kahle & Malhotra, 1994).

By implementing an environmental management system, the company can build a good image in front of the public and attract more consumers. In addition, another thing is that companies can also attract the attention of investors to invest in the company (Rajagukguk et al, 2020). Therefore, it can be concluded that there is a relationship between company age, company size and environmental management system on company performance (Budiono, Purba, & Adirinekso. G.P., 2020). The company size, age, and environmental management system are often underestimated for long-established companies. Therefore, in this research the authors want to prove that the factors that are often underestimated have a very important influence on the company going forward.

## **2. Literature Review**

### **2.1. Variables**

#### **Firm Size**

Over time, companies began to appear. Which where it makes companies need to be categorized into several factors one of which is in terms of size Which is large-sized companies tend to have financially well-established companies compared to those that are still small (Kallmuenzer & Peters, 2018). In addition, firm size is also defined as the quantity and array of production capability and potential a firm possesses or the quantity and diversity of services a firm can make available concurrently to its clients (Waluyo, 2017).

#### **Firm Age**

In addition to grouping based on company size, grouping is also based on age. Which is where usually large companies have been established for decades or may be older (older) whereas compared to companies that are still small, these companies can usually be categorized as newly established companies (young). Firm age itself an age is the length of time during which a being or thing has existed firm age as the number of years of incorporation of the company even though some believe that listing age, should define the age of the company (Medase, 2020).

#### **EMS (Environmental Management System)**

As more and more problems to the environment caused by company activities. Therefore, in order to reduce issues / problems on the environment, many companies began to use the EMS (Environmental Management System) to reduce the problems that occur in the surrounding environment (Johnstone, 2020).

Which in this modern era the company uses EMS as one of the effective ways to achieve social, environmental, and economic business goals. Other than that, organizations following EMS standards are compelled to adopt eco-friendly production processes, which result in improved environmental performance and ultimately in improvement in raw material efficiency, recycling processes, waste management and quality of product and service (Fatma, (2020); Voineal, (2020); Pechancova, (2019)).

## 2.2. Relation Between Variables

There are several relationships between variables to build the research model.

The relationship between firm size and company performance, which means there is a positive correlation between variable and other variables. Because firm size itself is one important factor that can affect company performance, the nature of the relationship that exists between firm size and profitability is a key element in business success which may shed some light on the factors that boost profits (Kallmuenzer & Peters, 2018). Which where the size of the company has a relationship with company performance. There is a positive relationship between firm size and company performance.

A company that has been established for a long time is considered to have entered a period where the company has matured. From every good side of the financial, experience, policy and others are more mature compared to the companies that have just been established (Budiono et al, 2021). Therefore, companies that have long been established usually have different company performance, some have entered the flat stage, some can still develop by following the times, and even companies that have collapsed. Age matters critically for both survival and growth. Two thirds of firms die within the first five years after birth, and although survival chances improve after age 5, only 10 percent of the cohort survive to age 15. Equally, most firms which grow, grow in the first five years, and the fastest rates of growth are recorded up to age 5 too (Coad, Holm, Krafft, & Quatraro, 2018). There is a positive relationship between firm age and company performance

By implementing EMS in the company. Gives companies several advantages compared to companies that do not implement EMS in their operations. Which is where the performance of implementing EMS is better than that of not implementing EMS. In addition, by not damaging the environment, the image of the company is better compared to companies that do not implement EMS Certification EMS enhances corporate image (Pechancová et al., 2019). There is a positive relationship between EMS and company performance.

Conceptual and operational definition in this research is as follow in Table 2.

**Table 2. Conceptual & Operational Definition**

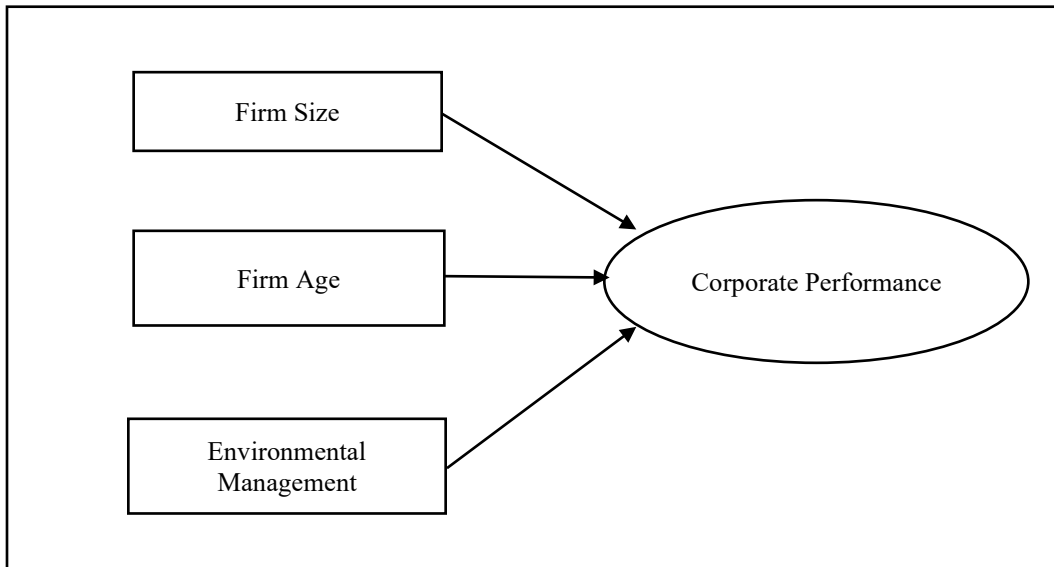
Variable	Conceptual Definition	Operational Definition
Firm Size	The quantity and array of production capability and potential a firm possesses or the quantity and diversity of services a firm can make available concurrently to its clients (Karlsson, 2020).	<ol style="list-style-type: none"> <li>1.the capacity and potential of a company</li> <li>2. big or small building of a company</li> <li>3. multiply from total asset and total sales</li> </ol>
Firm Age	The length of time during which a being or thing has existed.	<ol style="list-style-type: none"> <li>1. long or short the company has been established</li> <li>2. the moment when firm is born and get matured</li> </ol>
Environmental Management	Compelled to adopt eco-friendly production processes, which result in improved environmental performance and ultimately in improvement in raw material efficiency, recycling processes, waste management and quality of product and service (Voinea et al., 2020).	<ol style="list-style-type: none"> <li>1. A concept applied by companies to protect the environment</li> <li>2. A improvement from traditional system to ecofriendly system</li> <li>3. the company ways to protect the environment</li> </ol>
Company performance	The financial and marketing performance improvements resulted from implementing GSCM practices that lead to enhancing the firm's position compared to the industry average (Suchánek, Richter, & Králová, 2014).	<ol style="list-style-type: none"> <li>1.improvements as decreased cost of raw material purchased and energy consumed, decreased waste discharge costs and decreased costs of environmental accidents.</li> <li>2. the marketing-based improvements encompass an increased average return on sales and an increased average market share</li> <li>3. production capacity of the company</li> <li>4. an output from manufacturing process going on in the company</li> </ol>

Source: Designed for this research.

### 3. Methods

Based on the problems and causal relationships between firm size and corporate performance, firm age and corporate performance, also environmental management, and corporate management, we build the model as follow in Figure 2.

Figure 2. Research Model



Source: Research Design, 2021

The least-squares method is generally used for estimation purposes in the multiple-regression model. Once regression coefficients are obtained, a prediction equation can then be used to predict the value of a continuous output (target) as a linear function of one or more independent inputs (Rajagukguk et al, 2021). Regression models may be attributed to the interpretability of model parameters and ease of use. However, the major conceptual limitation of all regression techniques is that one can only ascertain relationship but can never be sure about underlying causal mechanism (Tso & Yau, 2007).

Next, the analysis tools used are the econometrics and statistics methods to test the models and their respective parameters. Based on the problems and possible causal relationships between firm size and corporate performance, firm age and corporate performance, and environmental management with corporate performance, we are compiling a research model. Next, the analysis tools used are the econometrics and statistical methods to test the model and their respective parameters (Greene, 2018). The unknown parameters of the stochastic relation  $y_i = x_i'\beta + \varepsilon_i$  are the objects of estimation. It is necessary to distinguish between population quantities, such as  $\beta$  and  $\varepsilon_i$ , and sample estimates of them, denoted  $b$  and  $e_i$ . the population regression is  $E[y_i|x_i] = x_i'\beta$ , whereas authors estimate of  $E[y_i|x_i]$  denoted.

$$\hat{y}_i = x_i'\beta \tag{1}$$

The disturbance associated with the  $i$ -th data point is

$$\varepsilon_i = y_i - x_i'\beta \tag{2}$$

For any value of  $b$ , we shall estimates  $\varepsilon_i$  with the residual

$$e_i = y_i - x_i'\beta \tag{3}$$

From the definitions, so The basic framework for analyzing cross section data is a regression model of the form (Greene, 2018)

$$y_i = x_i'\beta + \varepsilon_i = x_i'\beta + e_i \tag{4}$$

This study uses cross section data that includes in 501 districts & cities in Indonesia Territory. The purpose of this study is to analyze impact of firm size, firm age and environmental management towards corporate performance.

A multiple regression model with more than one explanatory variable may be written as the applied regression model for this study is

$$Ln\_CP = \beta_0 + \beta_1 SIZE + \beta_2 AGE + \beta_3 EM \quad (5)$$

Subsequently a calculation is made by estimating the suitability of the econometric model that is the magnitude of the R-squared and F-test with a significance level of 5%.

Based on the theoretical estimates for each parameter to achieve the desired model conditions in mathematical equations are as follows.

$$\beta_1 = \frac{\partial Ln\_CP}{\partial SIZE} > 0, \beta_2 = \frac{\partial Ln\_CP}{\partial AGE} > 0, \text{ and } \beta_3 = \frac{\partial Ln\_CP}{\partial EM} > 0 \quad (6)$$

Based on the calculus equation, the partial test of each independent variable is one way. firm size affects corporate performance in the same direction, firm age affects corporate performance in the same direction and environmental management affects corporate performance in the same direction. Thus, the value of each parameter  $\beta$  is expected to be positive.

While the partial testing of each independent variable on the dependent variable is carried out by t-test with a significance level in this study amounting to 5%.

By using the null hypothesis ( $H_0$ ) and alternative hypothesis ( $H_1$ ) for partial testing on the  $\beta_1$  parameter as follows:

$H_0 : \beta_1 = 0$ , firm size does not affects corporate performance

$H_1 : \beta_1 > 0$ , firm size affects corporate performance

The null hypothesis ( $H_0$ ) and the alternative hypothesis ( $H_1$ ) for partial testing on the  $\beta_2$  parameter are as follows

$H_0 : \beta_2 = 0$ , firm age does not affects corporate performance.

$H_1 : \beta_2 > 0$ , firm age affects corporate performance.

The null hypothesis ( $H_0$ ) and the alternative hypothesis ( $H_1$ ) for partial testing on the  $\beta_3$  parameter are as follows

$H_0 : \beta_3 = 0$ , environmental management does not affects corporate performance.

$H_1 : \beta_3 > 0$ , environmental management affects corporate performance.

Thus, it is clear in practical econometrics there is always outlier data which means the data do not follow general patterns. This problem becomes very serious and complex. A model is considered robust if it meets the requirements of basic assumptions. In regression analysis, a method for estimating parameters is needed to meet the best linear unbiased estimator (BLUE). One popular method used is Ordinary Least Square (OLS). The classic assumption that must be fulfilled in OLS so that the estimation results are robust is homoscedasticity. Violation of the assumption of homoscedasticity is called heteroscedasticity, which means that the error is not constant. The consequence of heteroscedasticity can result in the OLS estimator obtained still meets the requirements of unbiased, but the resulting variant becomes inefficient which means the variant tends to enlarge so that it is no longer the smallest variant. Therefore, the best traits will not be fulfilled (Greene, 2018).

This assumption is very important in the regression analysis because it relates to the estimated standard error of the regression coefficient. Standard error regression has a role in the formation of t-counts and F-counts will be overestimated which may subsequently produce conclusions that appear to be significant but not significant. Therefore, if the assumption of homoscedasticity is not fulfilled the results of the t-test are uncertain (Greene, 2018).

As Greene (2018) suggests the regression method is done by weighting the data with an appropriate multiplier factor. By using the Stata Software application version 15, automatically the selected weighting is the right weighting so that robustness is met the requirements. The results of the t-test and F-test will show the true value and are significant. Data analysis was performed by following the ordinary least square (OLS) econometric model framework (Purba & Budiono, 2019). The data collected for this were processed by the STATA Application Release 15 version.

#### 4. Result and Discussion

After obtaining primary data from the research instrument, the data will be assessed for its validity and reliability. In this study, the research instrument used is the electronic questionnaire which consist of research indicators as shown in the Table 3. for each research variables.

Table 3. Validity and Reliability Test

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
size1	195	+	0.7022	0.6047	0.1778	0.7040
size2	195	+	0.6351	0.5225	0.1853	0.7145
size3	195	+	0.6367	0.5244	0.1851	0.7142
age1	195	+	0.4458	0.3025	0.2066	0.7412
age2	195	+	0.5845	0.4621	0.1910	0.7220
age3	195	+	0.4956	0.3588	0.2010	0.7346
em1	195	+	0.4843	0.3460	0.2023	0.7361
em2	195	+	0.3476	0.1945	0.2176	0.7537
em3	195	+	0.5137	0.3795	0.1990	0.7321
cp1	195	+	0.5009	0.3649	0.2004	0.7338
cp2	195	+	0.3790	0.2286	0.2141	0.7498
cp3	195	+	0.4585	0.3167	0.2052	0.7396
Test scale					0.1988	0.7486

Source: Designed for this research.

The basis for decision making in the reliability test is the Cronbach's Alpha value of  $0.75 > 0.60$ , so the questionnaire is declared reliable or consistent. The validity testing based on Stata software shown in Table 3. The item-test correlation on the Table 3 is also showing result of validity based on r-table, which in this research all item-test correlation that more than value r-table.

Based on the proposed Research model, we conduct data processing in 195 observations (Unilever users). By using linear regression and robustness feasibility, the output of data processing is as follows.

Table 4. Result of Linear Regression for Corporate Performance of Unilever

Linear regression		Number of obs	=	195		
		F(3, 191)	=	17.59		
		Prob > F	=	0.0000		
		R-squared	=	0.2575		
		Root MSE	=	.11441		
Ln_CP	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
SIZE	.0519979	.0104499	4.98	0.000	.031386	.0726098
AGE	.0273649	.0154515	1.77	0.078	-.0031126	.0578423
EM	.0337032	.0193724	1.74	0.084	-.0045082	.0719146
_cons	.9898169	.0906054	10.92	0.000	.8111012	1.168532

Source: Data Processing

Based on the running data in Corporate Performance of Unilever are influenced by independent variables in the model. The test results for the proposed model that the results of the value of F-test = 17.59 and probability F = 0.00 smaller than the significance level of 5%, we reject the null hypothesis. The independent variable firm size, firm age and environmental management simultaneously influence corporate performance.

The partial analysis shows that the results of the t-test on the variable firm size, firm age and environmental management reject the null hypothesis and the direction of the positive coefficient. The value of this positive

coefficient parameters supports to the theory. Every increase in firm size will increase the corporate performance by 0.052. Every increase in firm age will increase the corporate performance by 0.027. Every increase in firm size will increase the corporate performance by 0.052. Every increase in firm age will increase the corporate performance by 0.027. Every increase in environmental management will increase the corporate performance by 0.033.

Based from result of data processing, we can make the econometric model as follow,

$$\ln_{CP} = 0.989 + 0.052 \text{ SIZE} + 0.027 \text{ AGE} + 0.034 \text{ EM}$$

Of all the positive parameter coefficients, this explains the research results are not contrary to the theory. Each parameter value is different because of how big the impact of each independent variable is.

## 5. Conclusion

After processing the data using Stata 15.0, then the researchers analyzes the results of the data that has been obtained and is then linked with the hypothesis that has been previously made to find out whether the researchers' provisional assumptions can be accepted or rejected. Which then after going through a long analysis can be concluded as follows: Company size has positive impact on company performance. Company age has positive impact on company performance. Environmental management has positive impact on corporation performance (Purba et al, 2021).

Variable firm size has a positive and significant impact on company performance. Based on the results that have been obtained from distributing questionnaires that have been answered by respondents, the result is that many think the quality of company performance is determined by the size of a company. Because there are many assumptions that the bigger the company, the company performance will certainly have developed and more stable. It can be said that every large company must have experienced a process from below, namely standing from a small company along with the development of the company being large and every small company must sooner or later become a large company. And the development of the company cannot be separated from how the company makes policies and can innovate to continue to compete and develop in the future.

Basically, the firm age is assessed based on the company's experience from its inception, and in this study firm age itself has impact on company performance. The impact of firm age on company performance itself is positive. If the two are linked according to the data that has been obtained and then analyzed, it can be concluded that the experience that the company has greatly determines how the company's operational performance is. Which is where over time, an aging company has realized its many mistakes and then corrected it so that it can create stable operational activities. This is based on the journey that a company has gone through. Which is where this is considered to apply to all companies, both new companies and long-established companies. In addition, the results are based on data that assesses that the age of the company positively affects company performance, namely the journey taken by the company up and down. Which is where the company can only make policies to anticipate problems that may occur in the future.

Environmental management has a positive impact on the corporate performance of a company. Therefore, in this discussion, we will only discuss those related to corporate performance. Which is where Unilever itself can continue to maintain and improve the application of the environmental management that is currently being carried out (Papagiannakis, Voudouris, Lioukas, & Kassinis, 2019). This aims to provide positive impacts on the company, such as increasing the reputation of the company itself and attracting investors to invest. In applying for proper environmental management, companies must pay attention to standardization of environmental management based on ISO 14001 (De Oliveira, Oliveira, Ometto, Ferraudo, & Salgado, 2016). ISO 14001 itself contains how companies can save natural resources used, how the waste disposal system of a company is, how to produce a product that reaches consumers.

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