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The Effect Of Business Analytics And Organizational Green Culture On Green Competitive Advantage Moderated By Collaborative Competence

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Abstract: The era of globalization and the increasing level of corporate competition have changed the industrial sector business in managing companies both internally and externally. Internal management not only maximizes tangible company resources, but also intangible ones in the process of maximizing the value of its company (Widhiastuti et al., 2018). Resources that are predicted to affect company value are Green Competitive Advantage and integrated reporting. According to Wijayanto et al. (2019) green competitive advantage is a condition of positional advantage where the company has a successful strategy, and is difficult to imitate. Competitive advantage is the company's ability from its resources to achieve performance excellence over its competitors (Roos Ana et al., 2021). This study aims to analyze the influence of Business Analytics and Organizational Green Culture on Green Competitive Advantage and analyze the role of Collaborative Competence as a moderation of the influence of Business Analytics and Organizational Green Culture on Green Competitive Advantage. This study uses a quantitative correlational method where sampling is done using the Slovin formula and using purposive sampling techniques and data collection methods through distributing questionnaires. The study uses SPSS 25.00 and hypothesis testing uses Multiple Regression Analysis. This study uses primary data which is done by distributing questionnaires to students in the cities of Jakarta and Bandung. Based on the results of this study, it shows that Business Analysis and Green Organizational Culture have an effect on Green Competitive Advantage. Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage but Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage

Keyword: Business Analytics; Organizational Green Culture; Green Competitive Advantage; Collaborative Competence

INTRODUCTION

The era of globalization and the increasing level of corporate competition have changed the industrial sector business in managing companies both internally and externally. Internal management not only maximizes tangible company resources, but also intangible ones in the process of maximizing the value of its company (Widhiastuti et al., 2018). Resources that are

predicted to affect company value are Green Competitive Advantage and integrated reporting. According to Wijayanto et al. (2019) green competitive advantage is a condition of positional advantage where the company has a successful strategy, and is difficult to imitate. Competitive advantage is the company's ability from its resources to achieve performance excellence over its competitors (Roos Ana et al., 2021). This competitive advantage is expected to increase the added value of the goods and services offered by the company. Monetary results have very large consequences for overall achievement from a non-financial perspective. The increasing concern for the environment in various sectors occurs because decision makers face public sensitivity, environmental regulations, and pressure from shareholders to consider the environment more, so that non-financial output has significant performance. In terms of regulation, the government carries out supervision through relevant ministries to control company activities related to their implementation to reduce environmental damage. The Ministry of Environment and Forestry (KLHK) stated that the incident in Indonesia throughout 2019 which reached 1.5 million hectares occurred due to the long dry season and high land clearing through the burning process (CNBC, 2020). Resource and environmental issues are important aspects in the growth of stable business competitiveness. In contrast to the growth and complexity of the universal economy, interest in corporate competitiveness is increasing and awareness of environmental issues is essential. Environmental problems are getting worse and highlighting sustainable business competitiveness through the integration of conservation aspects in their economic activities. An important aspect in the GCA achievement strategy is the fulfillment of the organization's green culture. Management will direct workers to accept environmental innovation as a fundamental value of the organization and become more interested in environmental issues (Wang, 2019). Culture expresses the principles, values, ideas, and attitudes that shape the company's actions. Through the management team, corporate culture can be built on principles to achieve corporate goals (Gao, 2017). Green culture in organizations encourages employees to recognize that the company's green innovation is a core concept and emphasizes that they are interested in environmental issues.

Business analysis shows that this analysis has an important function in business, but there is still very little awareness of how business analysis affects the effectiveness of the company and the aggressive nature of the entity. Although the concepts of analytical skills and analytical technology have been explained in several previous studies, there has been no study that explains the dimensions and how they contribute to the company and the company's sustainable competitiveness. Competition occurs today between networks of organizations and individuals who combine their expertise and resources efficiently and effectively to succeed in the world economy. Recently, through the exchange of capital, knowledge, and risk, businesses have attempted to reinvent their companies and maintain their competitive advantage through collaboration. Despite the fact that collaboration has significant advantages, previous studies have noted a high failure rate among collaborative companies.

METHOD

Research object

Variabel	Indikator	Skala	No Perntayaan
Business Analytics (X1) Duan et al., (2020)	Business Intelligence	Ordinal	1,2,3
	Forecasting	Ordinal	4,5
	Simulation	Ordinal	6,7
Organizational Green Culture	Environment in Company objectives	Ordinal	1,2,3

(X2) Gandhi et al., (2017)	Internal policy on the environment	Ordinal	4,5
Collaborative Competence (X3) Liu & Huang. (2018)	Exchange of information regarding buyer needs and preferences	Ordinal	1,2
	The tendency to "engage in" the joint elaboration of the latest productions	Ordinal	3,4
	The spirit between buyers and suppliers is well coordinated	Ordinal	6,7
Green Competitive Advantage (Y) Damayanti & Augustine (2019)	Investing in generating new capabilities	Ordinal	1,2,3
	The latest method in serving customers	Ordinal	4,5
	New products related to social entrepreneurship perception of responsibility.	Ordinal	6,7

Data Analysis Methods

Normality Test

According to Ghozali (2020), the normality test is used to determine whether the data used is normally distributed. One way to see normality is to use a histogram by comparing observations with a distribution that approaches a normal distribution. If the data distribution is normal, the line that describes the data will follow its diagonal line. Normality testing in research is carried out using the Kolmogorov-Smirnov statistical test.

Multicollinearity Test

The multicollinearity test is used to test whether the regression model finds a correlation between independent variables. The multicollinearity test is carried out using the tolerance value and Variance Inflation Factor (VIF) (Choiriyah and Damayanti 2020). A good regression model should not have a correlation between independent variables. The basis for making decisions based on multicollinearity is as follows:

If VIF <10 and tolerance> 0.1 then there is no multicollinearity

If VIF> 10 and tolerance <0.1 then there is multicollinearity

Multiple Linear Regression Analysis

The data analysis method used in this study is multiple linear regression. According to (Sugiyono, 2015) Multiple linear regression analysis is used by researchers, if researchers intend to predict how the condition (rise and fall) of the dependent variable (criterion), if two or more independent variables as predictor factors are manipulated. According to Imam Ghozali (2013:98) Regression analysis is used to measure the strength of the relationship between two or more variables, also shows the direction of the relationship between the dependent and independent variables. The accuracy of the sample regression function in estimating the actual value can be measured from its goodness of fit. Statistically, at least this can be measured from the coefficient of determination, F statistic value and t statistic value (Ghozali, 2013)

Hypothesis Testing

According to (Sugiyono, 2018) Hypothesis is a temporary answer to the formulation of research problems, usually arranged in the form of a question sentence. It is said to be temporary because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection.
The regression model in this study is as follows:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \ldots\ldots\ldots\

Valid N (listwise)	112				

Sumber: Data Olahan SPSS (2023)

From the results of processing 112 data through SPSS version 26 as presented in the table above, it can be seen that: The Business Analysis (BUS_ANA) obtained a minimum value of 17, a maximum value of 29, a mean value of 25.9591 and a standard deviation of 2.47088. The Green Organizational Culture (ORG_ADV) obtained a minimum value of 15, a maximum value of 30, a mean value of 24.9123 and a standard deviation of 1.76516. The Green Competitive Advantage variable obtained a minimum value of 16, a maximum value of 33, a mean value of 26.6023 and a standard deviation of 2.68875. The Collaborative Competence (COL_COM) obtained a minimum value of 15, a maximum value of 32, a mean value of 27.0058 and a standard deviation of 2.23211.

Validity Test

Based on the validity test, it shows that all the instrument variable results are valid.

Reliability Test

The following are the results of the reliability test of each variable.

Table 1.

Reliability Statistics Business Strategy	
Cronbach's Alpha	**N of Items**
,726	**6**

Reliability Statistics Green Organizational Culture	
Cronbach's Alpha	**N of Items**
,854	**6**

Reliability Statistics Green Competitive Advantage	
Cronbach's Alpha	**N of Items**
,791	**6**

Reliability Statistics Collaborative Competence	
Cronbach's Alpha	**N of Items**
,685	**5**

The results of the reliability test show that the Cronbach's Alpha value is greater than 0.6, so all the variables above are reliable.

Normality Test

The following are the results of the normality test.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		112
Normal Parameters[a,b]	Mean	.0000000

	Std. Deviation	.94524092
Most Extreme Differences	Absolute	.223
	Positive	.132
	Negative	-.223
Test Statistic		.223
Asymp. Sig. (2-tailed)		.937[a]
a. Test distribution is Normal.		
b. Calculated from data.		

Source: Data processed by Researchers (2023)

Based on the research results, we can see that the significance value (Asymp. Sig. (2-tailed)) is 0.967 or greater than 0.05, which means that the data used for this study is normally distributed.

Heteroscedasticity test

The following are the results of the heteroscedasticity test

Table 4.
Heteroscedasticity test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.304	.630		.483	.630
	BUS_ANA	-.193	.059	-.746	-3.280	.561
	ORG_GRE	.468	.225	1.599	2.077	.483
	COL_COM	.271	.082	.812	3.312	.319
a. Dependent Variable: Abs_RES						

Source: Data processed by Researchers (2023)

From the table above, it can be seen that the significant value of the t-test of all independent variables with Absolute Residual (ABS_RES) is more than 0.05. So it can be concluded that in the regression model of this study there is no heteroscedasticity problem.

Multicollinearity Test

The following are the results of the multicollinearity test

Table 5. Multicollinearity test

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.291	1.063		4.980	.000		
	BUS_ANA	1.583	.320	.602	5.451	.000	.809	4.391
	ORG_GRE	1.868	.380	1.838	4.918	.000	.893	4.521
	COL_COM	3.540	.138	-.466	-3.913	.000	.819	4.906
a. Dependent Variable: GRE_ADV								

Source: Data processed by Researchers (2023)

In the table above, we can see that there are no independent variables that have a Tolerance value of less than 0.1 and there are no independent variables that have a Variance Inflation

Factor (VIF) value of more than 10. So it can be concluded that there is no multicollinearity between independent variables in the regression model.

Autocorrelation Test

The following are the results of the Autocorrelation test

Table 6
Autocorrelation Test

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.884[a]	.780	.745	.957	2.043
a. Predictors: (Constant), BUS_ANA, ORG, COL_COM					
b. Dependent Variable: GRE_ADV					

Source: Data processed by Researchers (2023)

The Durbin Watson value (d) in the data processing of this research result is 2.103, which means du < d < 4-du, namely: 1.6932 < 2.043 < 2.3068, this result shows that there is no autocorrelation in this research model.

Hypothesis Test

The following are the regression results.

Table 7
Regression Test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.784	9.807		2.425	.016
	BUS_ANA	.527	.099	.587	5.323	.000
	ORG_GRE	.154	1.279	.151	5.120	.005
	COL_COM	.565	1.169	.487	4.483	.000
	BUS_ANA* COL_COM	2.127	.523	1.761	3.063	.000
	ORG_GRE* COL_COM	.020	.001	.867	.825	.400
a. Dependent Variable: GRE_ADV						

Source: Data processed by Researchers (2023)

Based on the results above, the following equation can be made

GRE_ADV = 10.784 + 0.527 BUS_ANA+ 0.154 ORG_GRE + 0.565 COL_COM + 2.127 BUS_ANA*COL_COM + 0.020 ORG_GRE*COL_COM

Based on the results of this study, it shows that Business Analysis and Green Organizational Culture have an effect on Green Competitive Advantage. Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage but Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage

Coefficient of Determination Test (R2)

The purpose of conducting the coefficient of determination (R2) test is to evaluate the extent to which the independent variable is able to explain the dependent variable. The value of this test is between zero and one. If the resulting gain is close to 1, then the independent variable is better at explaining the dependent variable. If the gain is getting smaller, then the chance of the independent variable providing an explanation of the dependent variable is weak. The test results are presented in the following table:

Model	*Adjusted R Square*
1	0,205

The Adjusted R-Square result is 0.205, which means that the independent variable (Sustainability Performance) can be explained by the independent variable, namely 20.5%, while the remaining 79.5% is explained by other variables that are not included in this research.

CONCLUSION

Based on the results of this study, it shows that Business Analysis and Green Organizational Culture have an effect on Green Competitive Advantage. Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage but Collaborative Competence strengthens the influence of Business Analysis on Green Competitive Advantage

REFERENCES

Agoes, Sukrisno (2012) Auditing (Pemeriksaan Akuntan) oleh Kantor Akuntan Publik Edisi 4. Jakarta: Salemba Empat Alzoubi, E.S.S. (2016), "Audit quality and earnings management: evidence from Jordan", Journal of Applied Accounting Research, Vol. 17 No. 2, pp. 170-189.

Arnedo, L., Lizarraga, F. And Sanchez, S. (2008), "Going concern uncertainties in prebankrupt audit reports: new evidence regarding discretionary accruals and wording ambiguity", International Journal of Auditing, Vol. 12 No. 1, pp. 25-44.

Becker, C.L., M.L. Defond, J. Jiambalvo, K.R. Subramanyam. 1998. "The Effect of Audit Quality on Earnings Management". Contemporary Accounting Research Vol. 15 No. 1.

Butler, M., Leone, A.J. dan Willenborg, M. (2004), "An Empirical Analysis of Auditor Reporting and Its Association with Abnormal Accruals", Journal of Accounting and Economics, Vol. 37 No.2, Hlm. 139-165.

Cano-Rodriguez, M. (2010), "Big auditors, private firms, and accounting conservatism: Spanish evidence". European Accounting Review, Vol. 19 No. 1, pp. 131-159.

Hakki, T. W., Andriani, C., & Natalia, M. (2024). Peran Pemoderasi Corporate Business Risk Terhadap Hubungan CSR Disclosure, Integrated Reporting, Dan Corporate Reputation. Owner: Riset dan Jurnal Akuntansi, 8(1), 492-501.

Ikatan Akuntan Publik Indonesia (2011) Standar Profesional Akuntan Publik per 31 Maret 2011. Jakarta: Salemba Empat.

Jensen, Michel, C. and Eugene. F. Fama (1998) "Agency Problems and Residual Claims". Journal of Laws and Economic, Vol. XXVI.

Kasmir. (2009) Analisis Laporan Keuangan, Edisi kesatu. Jakarta: Rajawali Pers.

Kurniawati, K. (2017). Perubahan Opini Audit Dan Laba Takterduga Terhadap Waktu Penyampaian Laporan Keuangan (Studi Empiris Pada Perusahaan Basic Industry & Chemicals Yang Terdaftar Di Bursa Efek Indonesia Periode 2012-2014). Jurnal Akuntansi Bisnis, 9(1).

Mayangsari, S. (2002) “Bukti Empiris Spesialissasi Industri Auditor Terhadap Earnings Response Coefficient”, disajikan pada Simposium Nasional Akuntansi (SNA) 5, Semarang 5-6 September. beberapa

Nasrullah D. (2011) Faktor-Faktor yang mempengaruhi kualitas audit pada sektor publik dan karakteristik untuk meningkatkannya. uin.blogspot.com/2011/03/faktor-faktor-yang mempengaruhi.html). (http://nasrullahdjamil-

Purba, M. (2009) “Asumsi Going Concern (Suatu Tinjauan Terhadap Dampak Krisis Keuangan atas Opini Audit dan Laporan Keuangan.” Edisi pertama, Jakarta: Graha Ilmu.

Riyatno, (2007) ”Pengaruh Ukuran Kantor Akuntan Publik Terhadap Earnings Response Coefficients”, Jurnal Keuangan Dan Bisnis. Vol.5. (2) Hal 148-162

Fernando, R., Rusli, Y. M., & Hakki, T. W. (2023). Pengaruh Financial Distress, Litigation Risk Dan Capital Intensity Terhadap Accounting Conservatism. Prosiding Konferensi Ilmiah Akuntansi, 10.

Fransisca, M., & Setiawan, T. (2023). The Influencing Factors On The Going Concern Audit Opinion (Empirical Study Of Manufacturing Companies Listed On The Idx For The 2017–2021 Period). Jurnal Ekonomi, 12(3), 784-791.

Rusli, Y. M., Dahlan, K. S. S., Rani, E. D., & Harianto, D. (2023). Factors Influencing Investor Responses to Earnings Related Announcements in The Pandemic Era of Covid 19. Dinasti International Journal of Economics, Finance & Accounting, 4(3), 516-528.

Rusli, Y. M. (2016, October). Pengaruh kualitas audit dalam hubungan antara tax planning dengan nilai perusahaan. In Seminar Nasional Indocompac. Bakrie University. Scott, William R. (2000) Financial Accounting Theory, 2 nd Ed. Canada: Prentice-Hall

Santoso, Singgih (2013) Menguasai SPSS 21 di Era Informasi. Edisi 1. Jakarta: Gramedia, IKAPI.

Surjadi, M., Bangun, N., & Widiayana, W. (2024). The role of Free Cash Flow as a moderating factor in Intellectual Capital Disclosure which is influenced by the Audit Committee and Audit Quality. *Dinasti International Journal of Economics, Finance & Accounting*, 4(6), 788-795.

Surjadi, M., & Sinambela, S. (2017). Faktor–Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Manufaktur. Jurnal Akuntansi Bisnis, 9(2).

Susanto, K. (2022) ”Determinan Koefisien Respon Laba”, Jurnal Akuntansi & Manajemen. Vol 23. (3). Hal 153-163

Theresia, L., & Setiawan, T. (2023). Audit Tenure, Audit Lag, Opinion Shopping, Liquidity And Leverage, The Going Concern Audit Opinion. Jurnal Ekonomi, 12(3), 1064–1072. Retrieved https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/2138 from Yulius