

THE IMPACT OF COMPLEX BUSINESS STRATEGY ON ANNUAL REPORT READABILITY

Hernanda S.R., Nasih M.*

Abstract: This paper aims to investigate the relationship between business strategy and readability in Indonesia. This study uses a sample of 681 firm-year observations from the firms listed in the Indonesia Stock Exchange (IDX) between 2006 and 2017 for the 2010-2017 business strategy score. Data are processed using ordinary least square regression to establish the analysis result. This study finds that business strategy has a positive and significant relationship with annual report readability. These findings suggest that firms with more complex strategy produce less readable annual report while firms following less complex strategy generate better annual report readability. Business strategy influences a firm's operating complexity and environmental uncertainty, resulting in the variance of disclosures readability and complexity. This study results in the policymakers, investors, auditors and other stakeholders to consider a firm's business strategy in comprehending the annual report regarding decision-making.

Keywords: Business Strategy, Prospector, Defender, Readability, Firm Performance

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Introduction

Public companies are obliged to publish their annual report so that users can utilize it in the context of decision-making. According to the OJK Regulation Number 29/POJK.04/2016, the content of annual reports is classified into two categories: narrative disclosure and quantitative disclosure. In the average annual report, narrative information represents a major part of the disclosure, with an average of 80% compared to the rest of the report, consisting of numbers and representation of quantitative disclosure (Lo, Ramos and Rogo, 2017). In preparing the annual report, including the financial statements and its accompanying notes, and the management discussion and analysis (MD&A) section, managers have discretion on the language and writing style in their narratives over which context are to be emphasized

***Syaskiah Rizky Hernanda, Mohammad Nasih** Faculty of Economic and Business, Universitas Airlangga, Indonesia

✉Corresponding author: mohnasih@feb.unair.ac.id

(Loughran and McDonald, 2014). Li (2010) states that unstructured textual narratives in annual reports exhibit irregularities, ambiguities and managerial opportunism.

Prior research has shown several factors that can explain the variation in annual report readability, such as firm performance, earnings manipulation, financial reporting regulations and strict stock exchange disclosure (Ajina, Laouiti and Msolli, 2016; Lang, M., 2015; Feng Li, 2008; Lo et al., 2017; Lundholm, R. J., R. Rogo, 2014). Despite the extensive research done in investigating factors influencing annual report readability, the extent to business strategy as a factor to influence annual report readability only has a few attention. According to the authors' awareness, currently, only two studies have addressed the association between business strategy and annual report readability. The research done by Lim, Chalmers and Hanlon (2018) shows that business strategy has a positive and significant effect on annual report readability. They also found that the association between business strategy and annual report readability is not sensitive to earnings performance. The study measure the readability of the annual report's narrative disclosure as a whole, not specific to any section. Considering these past studies, this paper investigates the impact of business strategy on readability of the Management Discussion and Analysis (MD&A) section of the annual report, where managers tend to conduct greater discretion in disclosure (Lim et al., 2018).

In Indonesia, previous studies related to readability only cover the readability of elementary school books and newspaper. Although nowadays readability issues have gained more attention, in Indonesia, there are only a few interests in conducting research on the readability of corporate disclosures. Bonsall, Leone, Miller and Rennekamp (2017) argue that readability of narrative disclosure has economic consequences and that studies on readability disclosure are important and worth more attention. This study will investigate whether the business strategy explains the variation in annual report readability in Indonesia. As a firm's business strategy affects its information environment, performance, and managers' incentives to disclose information, (Zhang, 2016), we expect that business strategy will be related with annual report readability. Also, conducting measurement of firm-level business strategy in Indonesia has never been done before, making this study more interesting to uncover the relationship between business strategy and annual report readability.

According to Miles and Snow (2003, 1978), business strategy primarily influences a firm's operating complexity and environmental uncertainty. The strategy will be likely to drive the quality of company output (Tomorri et al., 2020; Vu and Ngo, 2019; Čepel, 2019; Kasik and Snapka, 2020). Miles and Snow, (2003, 1978) specify three types of business strategies that may exist simultaneously within industries:

Prospectors, Defenders and Analyzers. In this case, we specifically explore the MD&A readability of firms with prospector and defender strategy. According to Miles et al. (1978), firms with prospector strategy are innovation-oriented. They potentially increase their operational complexity and environmental uncertainty due to the risky nature of research and development and unpredictable consumer change, resulting in more complex disclosure and higher incentives to obfuscate information.

On the contrary, defender is firms pursuing a more stable cost-efficient strategy. Defenders are less exposed to operating complexity, environmental uncertainty and costly failure, resulting in less complex disclosure and lower incentives to obfuscate information. The proposition of the present study is that firms with more complex strategy have less readable annual report. This study uses data of firms listed in Indonesia Stock Exchange (IDX) between 2006 and 2017 for the 2010-2017 business strategy score index.

The findings indicate that business strategy and annual report readability in Indonesia has a positive and significant relationship. Following prior studies and the proposition, firms with a prospector (defender) have a less (more) readable annual report. Additional tests are also conducted to see the effects of business strategy when interacted with firm performance (proxied by return on asset) on annual report readability. The results show that when a firm with a more complex strategy has higher performance, it produces lower readability. Zhang (2016) found that prospector strategy is associated with poor organizational performance. In cases where prospectors have better performance, it is rational to argue that managers may also obfuscate information to protect their competitive advantage as prospectors are more innovative.

The present research contributes to the business strategy and annual report readability literature. The authors provide new insight into the first research in determining firms' business strategy in Indonesia and adding to the determinants of annual report readability by documenting that business strategy explains the variation in readability. The findings of the study also offer insight for policymakers pursuing to improve readability and reduce the complexity of annual reports, and inform whether investor, analyst, auditor and other stakeholders need to consider a firm's business strategy to comprehend an annual report. Overall, the authors have added a complete understanding of the association between business strategy and annual report readability.

The remainder of this paper proceeds as follows: Section 2 reviews the literature on annual report readability and business strategy, and hypothesis formulation; Section 3 describes sample, variables and research design; Section 4 presents the main results and discusses the findings; Section 5 concludes the implication of the findings.

Literature review

Brigham and Houston (1999) proposed signalling theory that is a behaviour of company management in giving clues to investors regarding management's view on the company's future prospects. Wolk, H. I., Tearney, M. G., and Dodd (2013) state that companies have the motivation to provide annual reports to the market because they send signals to stakeholders and reduce information asymmetry between companies and stakeholders. According to comprehension theory, readability affects individuals' understanding of the disclosures and, subsequently, their judgments (Kintsch, W., Van Dijk, 1978; Masson, M., Waldron, 1994). Complex narratives require investors to use more efforts in comprehending the information. This may impact their ability to understand and evaluate the firm's prospects based on the information and possibly impair their decision (Lim et al., 2018).

According to organizational theory, Miles and Snow (2003, 1978) proposed that firms, in general, develop relatively stable patterns of strategic behaviour in order to accomplish a good alignment with the perceived environmental conditions. Their typology involves four strategic types: defenders, prospectors, analyzers and reactors and only three viable business strategies that may exist simultaneously within industries; defenders, prospectors and analyzers. Prospectors are firms with an orientation to innovate and rapidly changing their product market mix, while defenders compete on the efficiency orientation, price, service or quality, focusing more on a limited set of product. Analyzers are in the middle by combining the attributes of both prospectors and defenders.

Extant studies suggest that prospectors are closely related to information asymmetry and outcome uncertainty. Owing to more significant project failure, firms following a prospector strategy are associated with poor organisational performance (Zhang, 2016). When managers fail to deliver the expected performance, they tend to obfuscate this failure by making annual reports less readable (Feng Li, 2008). However, extant literature also offers the alternative argument that firms following a prospector strategy have more significant incentives to provide more frequent voluntary disclosures, as evidenced by frequent issuance of press releases. Furthermore, prospectors are more closely followed by analysts, and this, in turn, reduces information asymmetry and uncertainty about firm values. This perspective suggests that prospectors would have incentives to become more transparent by filing more readable annual reports that are easy to understand by stakeholders. However, because prospectors are more innovative, they do not want to reveal information that would harm their competitive advantage. Earnings guidance and press releases are unlikely to reveal competitive information as they focus primarily on earnings. However, annual reports provide

significantly more details about a company's operations, so prospectors might choose to be careful in their reports, leading to their relatively low readability.

Conversely, firms following a defender strategy are less exposed to outcome uncertainty and tend to minimise R&D expenditures for their product set. Instead, they invest in technologies to enable cost-efficient production on a continual and predictable basis (Miles and Snow., 2003; 1978). Therefore, defenders experience gradual growth through market penetration of their existing product lines, which translates to better and more stable firm performance for defenders (Zhang, 2016). Thus, the gradual growth and better firm performance of defenders minimize the need for obfuscation and encourage them to produce narrative disclosures that are more readable and easier to understand (Hussain et al., 2020). Given the strong evidence supporting high information asymmetry and project uncertainty faced by prospector-type firms compared to defender-type firms, it is argued that prospectors' textual disclosures will be more challenging to understand and textual disclosures by defender firms will be easier to read. The authors, therefore, develop the following hypotheses:

Hypotheses 1: Business strategy is positively associated with annual report readability.

Hypotheses 2: Firm performance strengthens the positive association between business strategy and annual report readability.

Research methodology

This study uses a quantitative research method. Quantitative research focuses on gathering numerical data and generalizing it across groups or explaining a particular phenomenon (Babbie, 2010). According to Anshori and Iswati (2009), quantitative research is structured research and quantifies generalised data. Regarding the approach used, this study aims to obtain the explanations behind the relationship between business strategy as the independent variable and readability as the dependent variable and firm performance as the moderating variable.

The initial sample of this study is all public companies listed in Indonesia Stock Exchange (IDX) between 2010 and 2017. The initial sample then went through a selection process. Table 1 shows the sample selection process. The criteria are as follows: firms with missing historical data are eliminated, financial industry (SIC 6) is excluded due to the nature of different reporting, and firms with insufficient data for strategy index measurement are also eliminated. After merging all variables into one data collection, firms with missing data are eliminated. Thus, this research has considered 681 firm-year observations. Data are obtained from OSIRIS database and hand-collected through the official website of IDX. Both data are later merged into one data collection. The majority of financial data used in this study are obtained from OSIRIS, except for operating expense, several business segments and geographic

segments, which are hand-collected through financial statements. Readability scores are also manually extracted from the annual report and computed using a readability software; the results are then manually inserted into Microsoft excel.

The dependent variable in this study is the readability of Management Discussion and Analysis (MD&A) section of the annual report. The authors measure the readability of financial statement footnotes using four different proxies from prior literature (Bonsal and Miller, 2017; Lehavy et al., 2011; Rennekamp, 2012), namely: Gunning-Fog Readability Index (*GF*), Simple Measure of Gobbledygook (*SMOG*), Flesch-Kincaid Grade Level (*FKG*) and Flesch-Kincaid Readability Index (*FKR*). Developed by American businessman, Robert Gunning, the Gunning Fog (FOG) Index estimates the years of formal education needed to comprehend a passage of text on the first reading. The higher score in Gunning-Fog index means that to understand a text, we need a higher level of formal education.

Table 1. Sample Selection

Description	Total
Total initial sample less missing historical data and firm-years operating in financial industries (SIC 6)	3,962
Less firm-years with insufficient five-year rolling data to compute six business strategy component variables	(3,044)
Firm-years with available business scores in 2010-2017	918
Firm-years after merging with readability and control variables	681
<i>Comprising</i>	
Defender firm years	110
Prospector firm years	19
Analyzer firm years	552

$$\text{Gunning Fog Index} = 0,4 \{(\text{total words}/\text{total sentences}) - 100 ([\text{complex words}]/\text{total words})\}$$

In Flesch-Kincaid Reading (FKR), the higher the score means it has good readability. Lower scores indicate text that is more complicated to understand. In contrast, in Flesch-Kincaid Grade Level (FKG), the higher the score means a text is less readable. Both Flesch-Kincaid reading ease and grade level use the same core metrics: word length and sentence length, but they correlate inversely. However, in this study, the results of Flesch-Kincaid reading ease are multiplied by negative to provide easier data interpretation.

Flesch Kinacid Ease = $206,835 - 1,015 \left(\frac{\text{total Words}}{\text{total sentences}} \right) - 84,66 \left(\frac{\text{total syllables}}{\text{total words}} \right)$

Flesch Kinacid Grade = $0,39 \left(\frac{\text{total words}}{\text{total sentences}} \right) + 11,8 \left(\frac{\text{total syllables}}{\text{total words}} \right) - 15,59$

G Harry McLaughlin created the SMOG index, it estimates the years of education a person needs to comprehend a piece of writing. Determinants in calculating the number of complex words and polysyllabic words are the number of syllables in a word. A word with three or more syllables is classified as complex/polysyllabic words.

SMOG Index = $1,043 \sqrt{(\text{number of polysyllabic words} \times (30 / (\text{total sentences}))} + 3,1291$

All the readability measurements are done by software programmed to automatically calculate the result of narrative readability based on each readability measurement formulas.

This study operationalizes Miles and Snow typology by constructing a composite strategy index to classify firms as one of the three types: defenders, analyzers and prospectors. This study adopts Miles and Snow typology because Miles and Snow classification can be operationalized using accounting archival data and has been applied in recent empirical studies (Higgins, Omer and Phillips, 2015; Lim et al., 2018).

Following Lim et al. (2018), the present study uses accounting archival data to construct a composite business strategy score (SINDEX) for a sample of 3,962 Indonesia firm-year observations between 2006 and 2017. The study has used six financial ratios which capture different dimensions of Miles and Snow (2003, 1978) business strategy typology: (1) ratio of research and development to sales to compute the research intensity, (2) ratio of number of employee to sales to compute the operational efficiency, (3) sales growth rate to compute historical growth, (4) ratio of operating expense to sales to compute the marketing efforts (5) standard deviation of the number of employees to compute organizational stability and (6) capital intensity ratios calculated by dividing property, plants and equipment to sales. Those six ratios will be used to generate a strategy index.

First, the authors have computed each of the six ratios using a rolling average over the past five years for each firm. Second, they rank each of the six ratios by forming quintiles for each SIC industry year group. For each firm-year observation, variables ranked in the highest quintiles are given a score of 5, in the second highest quintiles are

given a score of 4, and so on (except capital intensity, which is reverse-scored so that observations in the lowest (highest) quintile are given a score of 5 (1)). Third, we calculate the strategy index (SINDEX) as the sum of the individual scores across the six ratios for each firm-year observation. Higher strategy scores represent companies with prospector strategies, and lower scores represent companies with defender strategies. The minimum and maximum values of SINDEX are 6 and 30, respectively. The authors have used the following cutoffs to classify business strategy types: defender ($6 \leq \text{SINDEX} \leq 12$); analyzer ($13 \leq \text{SINDEX} \leq 23$); prospector ($24 \leq \text{SINDEX} \leq 30$).

Following prior studies with a related interest in readability (Ajina et al., 2016; Ben-Amar and Belgacem, 2018; Chakrabarty, Seetharaman, Swanson and Wang, 2018; Feng Li, 2008; Lo et al., 2017), the researchers have used several variables to control readability, namely firm performance proxied by return on asset (ROA) computed by earnings divided by total assets, leverage (LEV) measured as long-term debt divided by total assets. In general, companies with a higher proportion of debt are expected to provide a less readable annual report (Ajina et al., 2016), loss (LOSS) as a dummy variable 1 if earnings are negative and 0 otherwise; firm size is proxied by a natural algorithm of market capitalization (FSIZE); auditor type (BIG4), a dummy variable in which scored 1 if firms are audited by big four audit firms and 0 otherwise; number of business segment (BUSEG), and number of geographic segment (GEOSEG). The authors have also controlled the fixed industry effects and fixed year effects.

Data analysis was performed using STATA 14.0 software. The data analysis technique used in this study is descriptive analysis, Pearson correlation test, and multiple linear regression test. Heteroscedasticity and winsorizing technique were carried out before conducting the analysis test. The process was to overcome the problem of extreme data originating from outliers that could distort the results of the study. The regression model used for their respective hypotheses in this study is as follows:

$$H1: \text{READ}_{i,t} = \alpha + \beta_1 \text{SINDEX}_{i,t} + \beta_2 \text{CONTROL}_{i,t} + \epsilon_{i,t} \quad (1)$$

$$H2: \text{READ}_{i,t} = \alpha + \beta_1 \text{SINDEX_ROA}_{i,t} + \beta_2 \text{SINDEX} + \beta_3 \text{ROA}_{i,t} + \beta_4 \text{CONTROL}_{i,t} + \epsilon_{i,t} \quad (2)$$

Result and discussions

A descriptive statistic is presented in table 2 below; all data presented has been winsorized. The mean of four readability measurements, namely Flesch-Kinacid Grade, Flesch-Kinacid Reading Ease, Gunning-Fog index, and SMOG Index are 21.766, 25.559, 25.482, and 19.973. respectively. The average score of business strategy index is 16.461, with a minimum score of 6.000 and a maximum of 26.000.

This implies, firms in Indonesia on average are following the analyzer business strategy.

Table 2. Descriptive Statistics

	Mean	Median	Minimum	Maximum
<i>FKG</i>	21.766	21.773	13.041	29.235
<i>FKR</i>	25.559	25.611	-32.162	91.883
<i>GF</i>	25.482	25.491	13.530	33.487
<i>SMOG</i>	19.973	20.035	10.686	26.874
<i>SINDEX</i>	16.461	16.000	6.000	26.000
<i>ROA</i>	0.123	0.106	-0.232	0.691
<i>LEV</i>	0.155	0.121	0.000	1.650
<i>LOSS</i>	0.140	0.000	0.000	1.000
<i>FSIZE</i>	18347920	2450417	17000	550184503
<i>BIG4</i>	0.483	0.000	0.000	1.000
<i>BUSEG</i>	2.937	3.000	1.000	7.000
<i>GEOSEG</i>	2.286	2.000	1.000	15.000

This study also employs the Pearson correlation test shown in table 3. It shows the correlation between variables that are used in this study. The Pearson Correlation Test of the study shows that higher score of business strategy index leads to higher score of Flesch-Kinacid Grade (FKG) readability with the coefficient of 0.083 ($t=0.030$) with 5% significance level. This implies that firms with more complex strategy generate less readable MD&A. The relation between business strategy index with Flesch-Kinacid Reading Ease (FKR) shows the coefficient of 0.114 ($t=0.003$) with 1% significance level. Strategy index in relation with Gunning-Fog (GF) index and SMOG index shows the result with a coefficient of 0.092** ($t=0.016$) and 0.079** ($t=0.040$) respectively, both have the significance level of 5%. All results show the relationship between business strategy and readability measurement and imply that firms with a higher score of strategy index produce less readable MD&A. This result illustrates that all readability scores show overall bad readability of the annual report.

Table 3. Pearson's Correlation

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
[1]FKG	1.000											
[2]FKR	0.677*** (0.000)	1.000										
[3]GF	0.960*** (0.000)	0.685*** (0.000)	1.000									
[4]SMOG	0.972*** (0.000)	0.613*** (0.000)	0.955*** (0.000)	1.000								
[5]SINDEX	0.083** (0.030)	0.114*** (0.003)	0.092** (0.016)	0.079** (0.040)	1.000							
[6]ROA	0.066 (0.085)	0.044 (0.248)	0.063 (0.098)	0.067 (0.080)	0.286*** (0.000)	1.000						
[7]LEV	0.019 (0.621)	-0.013 (0.744)	-0.015 (0.689)	0.042 (0.271)	-0.119*** (0.002)	-0.118*** (0.002)	1.000					
[8]LOSS	-0.080** (0.037)	-0.086** (0.025)	-0.076** (0.047)	-0.069** (0.073)	-0.076** (0.049)	-0.460*** (0.000)	0.065* (0.092)	1.000				
[9]FSIZE	0.127*** (0.001)	0.068* (0.075)	0.095** (0.013)	0.133*** (0.000)	0.236*** (0.000)	0.454*** (0.000)	0.063 (0.101)	-0.239*** (0.000)	1.000			
[10]BIG4	0.119*** (0.002)	0.011 (0.773)	0.076 (0.048)	0.133*** (0.000)	-0.138*** (0.000)	0.305*** (0.000)	-0.007 (0.846)	-0.152*** (0.000)	0.385*** (0.000)	1.000		
[11]BUSEG	-0.043 (0.258)	0.033 (0.385)	-0.050 (0.195)	-0.043 (0.267)	-0.065* (0.090)	-0.096** (0.012)	-0.002 (0.953)	-0.138*** (0.000)	0.082** (0.032)	0.019 (0.617)	1.000	
[12]GEOSEG	-0.056 (0.147)	0.048 (0.215)	-0.050 (0.188)	-0.024 (0.528)	-0.161*** (0.000)	-0.134*** (0.000)	0.115*** (0.003)	-0.058 (0.133)	0.006 (0.872)	0.180*** (0.000)	-0.013 (0.727)	1.000

Notes:

This table shows the Pearson correlation levels of business strategy and readability in 681 samples of firms listed in IDX between 2010-2017

***Correlation is significant at the 1% level (2-tailed); **Correlation is significant at the 5% level (2-tailed); *Correlation is significant at the 10% level (2-tailed).

Table 4 represents the main regression result of first hypothesis, which analyzes the relationship between business strategy and readability. In column [1], the coefficient of SINDEX on FKG is positive (0.059) and significant at the five percent level (t-statistic = 2.56). In column [2], the coefficient of SINDEX on FKR is positive (0.307) and significant at the one percent level (t-statistic = 2.83). In column [3] and [4], coefficients of SINDEX on GF and SMOG are 0.069 (t-statistic=2.65) and 0.061 (t-statistic=2.62), respectively, both are significant at the one percent level. In aligned with Lim et al. (2018), these results suggest that firms with a higher business strategy score, resembling a prospector strategy, have lower readability.

Table 4. Business strategy and readability

	Prediction Sign	[1] FKG	[2] FKR	[3] GF	[4] SMOG
SINDEX	+	0.059** (2.56)	0.307*** (2.83)	0.069*** (2.65)	0.061*** (2.62)
ROA	-	-1.437* (-1.65)	-5.251 (-1.33)	-1.068 (-1.12)	-1.144 (-1.30)
LEV	+	0.148 (0.28)	-0.791 (-0.32)	-0.319 (-0.55)	0.439 (0.82)
LOSS	+	-0.607** (-2.44)	-2.911** (-2.17)	-0.622** (-2.23)	-0.475* (-1.92)
FSIZE	+	0.054	0.109	0.035	0.054

		(1.34)	(0.61)	(0.82)	(1.35)
BIG4	-	0.434***	0.323	0.312*	0.477***
		(2.59)	(0.43)	(1.69)	(2.79)
BUSEG	+	-0.338**	-0.980	-0.344**	-0.299*
		(-2.29)	(-1.35)	(-1.97)	(-1.95)
GEOSEG	+	-0.063	-0.131	0.004	0.016
		(-0.52)	(-0.20)	(0.03)	(0.13)
_cons	?	19.261***	15.670***	23.225***	17.254***
		(24.27)	(4.71)	(27.34)	(21.21)
R²		0.091	0.075	0.082	0.087
Adj. R²		0.062	0.045	0.053	0.057
N		681	681	681	681

Additionally, Table 5 and 6 represent a robustness test for the main finding. SINDEXT is replaced with separate variables for the defender (DEF) and prospector (PROS) firms. The present study finds significantly negative (positive) coefficients on DEF (PROS), suggesting that defenders (prospectors) are associated with more (less) readable MD&A. It is consistent with our hypothesis that prospectors are associated with less readable MD&A relative to defenders.

Table 7 shows the regression result of the correlation between business strategy and readability while being moderated by firm performance. SINDEXT_ROA in association with FKG, GF and SMOG are found to be positive and significant. In column [1], the coefficient of SINDEXT on FKG is positive (0.464) and significant at the five percent level (t-statistic = 2.55). In column [3], the coefficient of SINDEXT_ROA on GF is positive (0.578) and significant at the one percent level (t-statistic = 2.61). In column [4], the coefficient of SINDEXT_ROA on SMOG is 0.404 (t-statistic=2.03) and significant at five percent level. Association between SINDEXT_ROA and FKR are also positive but not significant. The result is consistent with proposed hypotheses. Firms with higher business strategy score resembling prospector have good performance, they would produce less readable annual report readability (Miles and Snow, 1978). According to organizational theory, prospectors are more innovative, so it is rational to argue that prospector firms are careful not to reveal information that would harm their competitive advantage, leading to their relatively poor readability (Miles and Snow, 1978).

Table 5. Robustness test defender business strategy and readability

	Prediction Sign	[1] FKG	[2] FKR	[3] GF	[4] SMOG
<i>DEF</i>	-	-0.250** (-2.15)	-1.422*** (-2.90)	-0.319** (-2.19)	-0.221* (-1.75)
<i>ROA</i>	+	2.119 (0.68)	-1.362 (-0.11)	0.455 (0.12)	3.064 (0.93)
<i>LEV</i>	+	0.513 (0.48)	-6.404 (-1.57)	0.522 (0.39)	1.191 (1.03)
<i>LOSS</i>	+	-0.281 (-0.52)	-1.746 (-0.79)	-0.224 (-0.36)	-0.177 (-0.31)
<i>FSIZE</i>	+	0.033 (0.37)	0.237 (0.64)	0.075 (0.66)	0.052 (0.51)
<i>BIG4</i>	-	-0.425 (-1.00)	-1.349 (-0.86)	-0.698 (-1.32)	-0.544 (-1.14)
<i>BUSEG</i>	+	-0.673** (-2.43)	-2.695** (-2.51)	-0.660* (-1.93)	-0.595* (-1.91)
<i>GEOSEG</i>	+	0.191 (0.72)	-0.170 (-0.16)	0.099 (0.30)	0.192 (0.65)
<i>_cons</i>	?	21.889*** (12.17)	35.681*** (4.70)	25.881*** (11.43)	18.874*** (9.57)
<i>R²</i>		0.370	0.383	0.326	0.367
<i>Adj. R²</i>		0.220	0.235	0.166	0.216
<i>N</i>		110	110	110	110

Table 6. Robustness test prospector business strategy and readability

	Prediction Sign	[1] FKG	[2] FKR	[3] GF	[4] SMOG
<i>PROS</i>	+	1.261** (2.32)	2.861* (1.78)	1.344** (2.39)	1.207** (2.26)
<i>ROA</i>	-	-0.939 (-1.12)	-2.484 (-0.66)	-0.483 (-0.53)	-0.635 (-0.75)
<i>LEV</i>	+	0.192 (0.37)	-0.977 (-0.40)	-0.281 (-0.49)	0.475 (0.90)
<i>LOSS</i>	+	-0.571** (-2.30)	-2.742** (-2.05)	-0.581** (-2.08)	-0.439* (-1.76)

<i>FSIZE</i>	+	0.071 [*] (1.74)	0.232 (1.30)	0.056 (1.29)	0.073 [*] (1.78)
<i>BIG4</i>	-	0.319 [*] (1.89)	-0.331 (-0.42)	0.176 (0.96)	0.357 ^{**} (2.13)
<i>BUSEG</i>	+	-0.361 ^{**} (-2.51)	-1.077 (-1.51)	-0.370 ^{**} (-2.18)	-0.322 ^{**} (-2.15)
<i>GEOSEG</i>	+	-0.138 (-1.13)	-0.428 (-0.64)	-0.079 (-0.57)	-0.058 (-0.49)
<i>_cons</i>	?	19.968 ^{***} (27.75)	18.920 ^{***} (6.22)	24.031 ^{***} (31.72)	17.963 ^{***} (24.31)
<i>R²</i>		0.092	0.064	0.082	0.086
<i>Adj. R²</i>		0.063	0.034	0.052	0.057
<i>N</i>		681	681	681	681

Table 7. Business strategy and readability with firm performance moderating effects

	Prediction Sign	[1] FKG	[2] FKR	[3] GF	[4] SMOG
<i>SINDEX_ROA</i>	+	0.464 ^{**} (2.38)	1.299 (1.46)	0.578 ^{***} (2.61)	0.404 ^{**} (2.03)
<i>SINDEX</i>	+	0.004 (0.10)	0.151 (0.88)	-0.001 (-0.02)	0.012 (0.33)
<i>ROA</i>	-	-9.789 ^{***} (-2.77)	-28.625 [*] (-1.78)	-11.478 ^{**} (-2.83)	-8.427 ^{**} (-2.32)
<i>LEV</i>	+	0.177 (0.34)	-0.707 (-0.29)	-0.282 (-0.49)	0.464 (0.87)
<i>LOSS</i>	+	-0.706 ^{**} (-2.79)	-3.188 [*] (-2.39)	-0.746 ^{***} (-2.60)	-0.561 ^{**} (-2.18)
<i>FSIZE</i>	+	0.050 (1.26)	0.098 (0.55)	0.030 (0.71)	0.052 (1.28)
<i>BIG4</i>	-	0.405 ^{**} (2.43)	0.243 (0.33)	0.276 (1.51)	0.451 ^{***} (2.64)
<i>BUSEG</i>	+	-0.318 ^{**} (-2.16)	-0.925 (-1.28)	-0.319 [*] (-1.85)	-0.282 [*] (-1.85)
<i>GEOSEG</i>	+	-0.064 (-0.53)	-0.135 (-0.20)	0.002 (0.02)	0.014 (0.12)
<i>_cons</i>	?	20.205 ^{***} (22.09)	18.329 ^{***} (-4.43)	24.406 ^{***} (24.58)	18.075 ^{***} (19.09)
<i>R²</i>		0.096	0.077	0.089	0.091
<i>Adj. R²</i>		0.066	0.046	0.059	0.060
<i>N</i>		681	681	681	681

Conclusion

The present study investigates whether the business strategy is related to MD&A readability. It also examines this relationship when moderated by firm performance. Using a total sample of 681 firm-years of listed firms in Indonesia, the authors document a positive and significant relationship between business strategy and readability. Consistent with the hypothesis, it is found that firms following more complex business strategy (prospectors) have less readable MD&A related to the firm following less complex business strategy (defenders). It is also identified that the association between business strategy and readability is strengthened when moderated with firm performance. The current research suggests that as business strategy influences a firm's operating complexity and environmental uncertainty, it results in the variance of disclosures readability and complexity. These findings are consistent with prior studies suggesting that business strategy impacts the managerial motivation to disclose information. Therefore, the information environment of a firm depends on its business strategy.

However, the study has also acknowledged some limitations. The measurement of business strategy index in this study is proxied by six indicators that are derived only from the archival accounting data. This measurement is deemed to be not comprehensive enough to fully distinguish the different types of business strategy. In addition to that this method has eliminated a huge amount of initial sample more than expected resulting only small samples left. This study encourages future research to use better alternative measurement while conducting a similar study. At last, this study has only focused on the annual report's readability, it is suggested that future studies may examine the disclosure sentiments and tones of the annual report.

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WPLYW ZŁOŻONEJ STRATEGII BIZNESOWEJ NA CZYTELNOŚĆ RAPORTU ROCZNEGO

Streszczenie: Artykuł ma na celu zbadanie związku między strategią biznesową a czytelnością w Indonezji. W tym badaniu wykorzystano próbę 681 rocznych obserwacji firm notowanych na indonezyjskiej giełdzie papierów wartościowych (IDX) w latach 2006–2017 dla oceny strategii biznesowej 2010–2017. Dane są przetwarzane przy użyciu zwykłej regresji najmniejszych kwadratów w celu ustalenia wyniku analizy. Z badania wynika, że strategia biznesowa ma pozytywny i istotny związek z czytelnością raportu rocznego. Wyniki te sugerują, że firmy o bardziej złożonej strategii generują mniej czytelny raport roczny, podczas gdy firmy stosujące mniej złożoną strategię generują lepszą czytelność raportu rocznego. Strategia biznesowa wpływa na złożoność operacyjną firmy i niepewność środowiskową, powodując różnice w czytelności i złożoności ujawnień. Badanie to skłania decydentów, inwestorów, audytorów i innych interesariuszy do rozważenia strategii biznesowej firmy przy zrozumieniu rocznego raportu dotyczącego podejmowania decyzji.

Słowa kluczowe: strategia biznesowa, poszukiwacz, obrońca, czytelność, wydajność firmy

复杂的业务策略对年度报告可读性的影响

摘要：本文旨在研究印尼商业策略与可读性之间的关系。本研究使用了从2006年至2017年在印度尼西亚证券交易所（IDX）上市的公司681个公司年度观察数据作为2010-2017年业务战略得分。使用普通最小二乘回归处理数据以建立分析结果。这项研究发现，业务战略与年度报告的可读性具有积极而显著的关系。这些发现表明，采用更复杂策略的公司产生的年度报告可读性较低，而采用不那么复杂策略的公司则产生更好的年度报告可读性。商业策略影响公司的经营复杂性和环境不确定性，导致披露内容的可读性和复杂性差异。这项研究使决策者、投资者、审计师和其他利益相关者在理解有关决策的年度报告时考虑了公司的业务战略。

关键字：商业策略，潜在客户，防御者，可读性，公司绩效