

The effect of corporate digitalization on the value of firm

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ABSTRACT

Information digitalization provides convenience for various parties. In the business world, companies provide digital information to investors for creating signals of development or growth in their business. In this study, the researchers seek to determine the effect of digit-izing information on firm value. This quantitative research method uses a sample of all companies listed on the IDX in 2020. The results show that information digitalization does not affect the firm value. Based on this evidence, it implies that this research can provide insight for the company. This can be due to the consideration of the large number of internet users, in which the companies can provide company information such as company performance, and general notifications regarding the company through other media such as social media.

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ABSTRAK

Digitalisasi informasi memberikan kemudahan berbagai pihak. Dalam dunia bisnis, perusahaan memberikan informasi digital kepada investor sehingga menciptakan sinyal adanya perkembangan atau pertumbuhan dalam bisnisnya. Penelitian ini berupaya mengetahui pengaruh digitalisasi informasi terhadap nilai perusahaan. Metode penelitian ini yaitu kuantitatif dengan menggunakan sampel seluruh perusahaan yang terdaftar pada BEI tahun 2020. Hasil penelitian menunjukkan bahwa digitalisasi tidak berpengaruh terhadap nilai perusahaan. Dari penelitian ini, bias berimplikasi bahwa penelitian ini mampu memberikan pandangan untuk perusahaan. Hal ini dikarenakan banyaknya pengguna internet, perusahaan dapat memberikan informasi perusahaan seperti kinerja perusahaan, pemberitahuan umum terkait perusahaan melalui website atau media sosial yang ada.

Keyword:

Digitalization, Information, Firm Value.

1. INTRODUCTION

Internet users have been increasing during the Covid-19 pandemic. They spend more time in cyberspace. According to APJII (2020), in 2020, Indonesian internet users were 73.7 percent, an increase of 8.9 percent from the previous year. In addition, according to Wearesocial (2021), data on the number of active social media users is 170 million of the total population in Indonesia. The average Indonesian uses the internet for 8 hours 52 minutes a day. They can use their time to access social media for 3 hours 14 minutes. The more widely used applications are Youtube, Whatsapp, Instagram, Facebook, and Twitter. Thus, people have more choices to access information.

According to the Global Overview Report (2021), more people access via mobile phones than laptops, tablets, or other devices. This indicates that someone can immediately find out and access it easily and quickly with just a cell phone. In the report, the most accessed website is Google. Total google visitors reached 1.42 million with a time of about 23 minutes 36 seconds. After Google, the most news-related websites are detik, kompas, and tribunnews. With this website, people can obtain information directly.



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Information digitalization is easier to develop and the users can easily distribute. The process of changing from a printed document to a digital presentation is called digitization (Deegan, 2002). Information digitization can provide benefits including creating an information society so that people have the information they need, growing the creative industry from digital information, and advancing the business world by utilizing information that is distributed digitally. In addition, other benefits are increased accessibility, increased benefit, and efficiency of maintenance costs (Pinusa, 2018). One can easily access and find out company information easily. The importance of digitization can shed light on information related to digital processes, which are becoming increasingly relevant for investors in their investment choices. Therefore, information digitalization makes it easier for investors to assess the company from the information that they have obtained.

Yang et al. (2021) conducted a research related to information through social media engagement and corporate advertising expenditures. The results show that social media involvement has a significant and positive relationship with the value of tourism and hospitality companies. Moreover, increasing advertising investment weakens the beneficial effect of social media engagement on firm value. According to Bai et al. (2014), under the current Chinese market system and established regulations, there is an unexpected relationship between the company's overall performance (especially business and profit performance) and the willingness and level of disclosure of the company's actual online information. More specifically, firms with low levels of earnings performance have a strong motive for disclosing less information to avoid a potential discount to the firm's market value.

In contrast to the research of Sugito et al. (2013) related to the extent of information disclosure through the company's website or not. The results of the study indicate that there is no difference in firm value between companies disclosing through the website and companies not disclosing through the website. Furthermore, research by Parasetya & Kurniawan (2021) found that disclosure of financial information and disclosure of information about shares through the company's website did not affect firm value. In this research, the information disclosed is only related to the company's finances.

This research develops the research by Novitasari (2017), Widari et al. (2018), and Narsa & Pratiwi (2018) related to information disclosure through company websites. Previous research only considered the basic company profile, financial reporting, and the annual report of the directors using a different point scale in its measurement. For that reason, this study develops information digitization items by referring to the research of Salvi et al. (2021) with five levels: digital communication instruments, e-commerce, and data management, information on digitalization and relevant activities; and investment in digitization and relevant activities. However, in Indonesia, there is no disclosure regarding investment in digitization. Therefore, the researcher uses four levels, namely digital communication instruments, e-commerce, data management, information about digitization, and relevant activities to determine the effect of digitizing information on company value in companies listed on the Indonesia Stock Exchange 2020.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Signaling Theory

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Spence (1973), a proponent introduced a signaling theory of signaling theory. This theory explains the existence of a signal or information signal that is useful for the recipient and is given by the owner of the information that describes the condition or state of the company. In formulating his signal theory, Spence (1973) used the labor market to model the signaling function of education. Potential employers lack information about the quality of job candidates. Therefore, the candidates get an education to demonstrate their qualities and reduce information asymmetry. This may be a reliable signal as low-quality candidates will not be able to withstand the rigors of higher education.

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Signaling theory suggests that the signaler has a greater share of inside information that is not publicly known by public, with signal quality being equally important (Spence, 1973). Despite the abundance of public information, there is a difference between what people know and what new signals can interpret. Signal theory suggests that negative or positive information when illustrated by the signaler will be useful to the receiver (Kirmani and Rao, 2000). The signal given is new information or additional information previously owned by the recipient (Yasar et al., 2020).

A key aspect of quality directly correlates with the signaler's reputation or prestige due to the number of signals (Certo, 2003). The company's urge to disclose information to outsiders and it is actually in signal theory. According to Puspita (2014), this encouragement is due to the information asymmetry between the agent and the principal. Therefore, to reduce information, companies should disclose their information to the public.

Hypotheses Development

Disclosure of company information can be either mandatory or voluntary. Disclosure of information by the company can increase a signal for the recipient of the information. This relates to signaling theory. Signalling theory suggests that negative or positive information when illustrated by the signaler is useful to the receiver (Kirmani and Rao, 2000). Disclosure of information can use a variety of media.

According to Anderson et al. (2006); Belvedere et al. (2013); Martín-Peña et al., (2020), digitalization is an important driver that can affect a company's financial performance. Digitalized companies have a competitive advantage over competitors that guarantees improved past and expected performance (Martín-Peña et al., 2020). Adequate representation of this information, representing the signals sent by the company to investors is expected to lead to a better perception of the company by investors, thereby increasing the value of the company. Therefore, with digitalization, it can reduce information asymmetry or transparency, which can increase the value of the company.

The volume of information provided online by companies continues to increase, contributing to more effective dissemination of information to economic agents, reducing associated costs (e.g., printing or staffing costs) Besides that, can also increase the frequency and speed of dissemination (Bushman & Smith, 2001). López-Arceiz et

al. (2019) emphasize the importance of online information, defining it as a mechanism to facilitate companies in achieving their strategic and financial goals. Based on the above, the following research hypotheses:

H1: Information on company digitalization has a positive effect on company value

3. RESEARCH METHODS

Sampling and Sampling Techniques

This study uses a quantitative approach and it is an explanatory research because it aims to determine the effect of company digitization information on company value in companies listed on the Indonesia Stock Exchange in 2020. The data used in this study is secondary data obtained through the company website and company annual reports, as well as report data. The company's financial reports are also from the OSIRIS database. The data analysis technique used is Ordinary Least Square (OLS) using the SPSS 25 application.

The target population and characteristics used in data collection are all 748 companies listed on the Indonesia Stock Exchange in 2020 and display data and information that they can use for testing consisting of several issuers. In 2020, it is the year of a pandemic. However, in that year, internet users increased considerably and the level of investment increased. The sample used in this study were all non-financial companies in 2020. The sampling technique was non-probability sampling.

Figure 1, shows the conceptual framework for the influence of digitization of information on firm value. To test the effect of digitalization information on firm value, the regression equation is:

$$TQ = \beta_0 + \beta_1 ID + \beta_2 FS + \beta_3 PROFIT + \beta_4 LIQ + \beta_5 EGR + \beta_6 LEV + \varepsilon \dots \dots \dots (1)$$

Where:

- TQ = Tobins' Q
- ID = Information Digitization.
- FS = Firm Size
- Profitability = Return On Assets,
- LIQ = Liquidity
- EGR = Earnings Growth Rate
- LEV = Leverage
- β_0 = Intercept / constant
- $\beta_1 - \beta_6$ = Correlation coefficient
- ε = Coefficient of error

Table 1
Sample Criteria

Notes	2020
The total number of companies listed on the IDX	748
reduced:	
Financial sector companies	(76)
Did not get the required data*	(105)
Total observation	567

Source: Processed Data

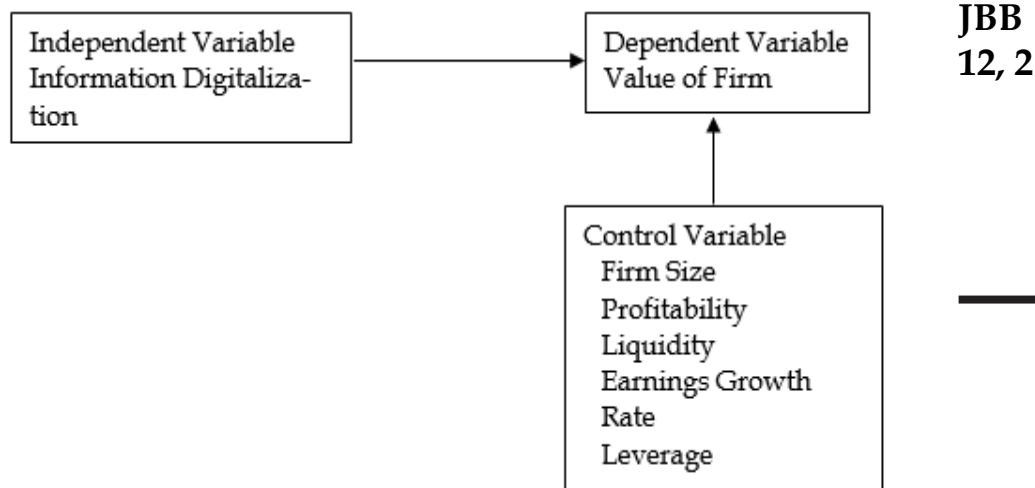


Figure 1
Conceptual Framework

Operational Variable

Dependent Variable

The dependent variable in this study is firm value. Firm value is an investor's view of the good and bad performance of the company so a high company value makes investors believe in prospects, which can rise stock prices (Sukoco & Wahyudi, 2013). The measurement uses Tobins'Q, namely the ratio of the company's market value and the replacement value of its assets (Lindenberg and Ross, 1981).

Tobin's Q= $(MVE+PS+Debt)/TA$

Where:

MVE = Market Value

PS = Preferred Share

Debt = Debt

TA = Total Asset

Independent Variable

The independent variable in this study is the digitization of information. Information digitization is the process of converting analog information into digital data (Brennen and Kreiss, 2016). In the re-search of Salvi et al., (2020), the digitization of information was measured by applying the manual content analysis of the company's website. Referring to the manual content analysis items of the website, in this research, there are sixteen items. In Indonesia, it is not disclosed related to the company's digitalization in-vestment. Each item is given a value equal to 1 if it is on the company website and 0 if it is not. All items are given the same rating or weight in the calculation of the final score. Based on construction, the overall score can vary between zero and seventeen.

Control Variable

This study also uses control variables, which include firm size, profitability, liquidity, earnings growth rate, and leverage.

Table 2
Company Digitalization Analysis Items

No.	Category	Item
1.	Digital communication instrument	1. Email address 2. Limited access area 3. Web application 4. Share documents and cloud applications 5. Place in search engines (search engines) 6. Mobile version website
2.	E-commerce	7. Online product catalog 8. Online shopping 9. Online payment
3.	Data Management	10. Data protection policy 11. Privacy policy
4.	Information about digitization and relevant activities	12. Inbound logistics 13. Operation 14. Outbound logistics 15. Administration 16. Marketing and sales 17. Post-sales service

Source: Processed Data

Table 3
Control Variable Measurement

Control Variable	Measurement
Firm Size	Natural logarithm of total assets
Profit	Profit before tax divided by total assets
Likuditas	current assets divided by current liabilities
Earning Growth Rate	The difference between Sales t and Sales t-1, then divided by Sales t-1
Leverage	Proportion of total debt divided by total assets

Source: Processed Data

3. RESULTS AND DISCUSSION

Descriptive Statistics

Based on table 4, it shows that the number of observations used for the regression model is 568. The minimum and maximum values of each variable indicate that the data used has a value with a large range. This value indicates that the values of these variables are highly dispersed.

The TOBIN'S Q value, as a proxy for value on firm, has a minimum value of 0.07811 and a maximum value of 3562.48. PT Electronic City Indonesia Tbk owns the company with the minimum TOBIN'S Q value in 2020. PT Zebra Nusantara Tbk owns the maximum TOBIN'S Q value in 2020. This analysis also shows an average value of 108.966 with a standard deviation of 310.374. This indicates that the company's stock price is more than the book value, which indicates that the company's prospects are quite good. In addition, the TOBIN'S Q value is greater than

one, indicating a good signal for the market because it is considered to have good prospects.

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The ID value, digitalization information, as an independent variable has a minimum value of 3 and a maximum value of 16. PT Agung Semesta Sejahtera Tbk owns the minimum company ID value in 2020. PT Garuda Indonesia (Persero) Tbk owns the company with the maximum ID value in 2020. This analysis shows an average value of 10,632 with a standard deviation of 1,839. This shows that the company discloses 10 of the 17 items or content. The company has used the company's website to disclose its lines, systems and business strategies. When viewed on the company's website, the average information includes e-mail, search engines, product catalogs, online shopping, payments, and data protection policies.

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The value of firm size, as a control variable has a minimum value of 22,602 and a maximum value of 33,454. PT Zebra Nusantara Tbk owns the minimum FS value of the company in 2020. PT Astra International Tbk owns the company with the maximum FS value in 2020. This analysis shows an average value of 28,307 with a standard deviation of 1,818. This shows that companies listed on the IDX have relatively increased total asset values so that the size of a company can be analyzed from total assets. The increase in the components of total assets owned by the company came from non-current assets, namely cash and cash equivalents, inventories, receivables from third parties, and components of non-current assets came from an increase in investment in subsidiaries, fixed assets and intangible assets.

Profitability value is a control variable that has a minimum value of -7.883 and a maximum value of 0.599. PT Tiphone Mobile Indonesia Tbk owns the minimum ROA value in 2020, while PT Fks Food Sejahtera Tbk owns the maximum company ROA value in 2020. The average value of this variable is -0.043 and the standard deviation is 0.421. This shows that most companies lose because they are unable to optimize their assets to generate profits. In addition to losses, assets that they did not utilize optimally by the company will also hinder the company's growth.

The value of liquidity is a control variable that has a minimum value of 0.002 and a maximum value of 410.24. PT Ratu Prabu Energi Tbk owns the company with the minimum CR value in 2020, while PT Protech Mitra Perkasa Tbk owns the company with the maximum CR value in 2020. The CR variable has an average of 5.057 and a standard deviation of 27.109. This shows that the company is able to fulfill its short-term obligations of 5.057 of the company's total assets in one period.

EGR value, earnings growth rate, is a control variable, which has a minimum value of -2,316 and a maximum value of 22.573. PT Pool Advista Finance Tbk owns the company with the minimum EGR value in 2020, while PT Triwira Insanlestari Tbk owns the company with the maximum EGR value in 2020. From the table, it indicates that the average EGR value is 0.113 and the standard deviation is 1.072. This shows that the company's revenue growth rate in the year of observation has not increased. Revenue growth in the year of observation, several companies experienced a decrease in revenue resulting in losses due to the impact of the pandemic.

The last control variable in this regression model is the LEV variable, leverage, which has a minimum value of -39,325 and a maximum value of 114,289. PT Capitalinc Investment Tbk owns the minimum value of this variable in 2020 and PT Asia Pacific Investama Tbk 2020 owns the maximum value of this variable. The average LEV value is 0.116 and the standard deviation is 0.124. The average value of leverage in one observation period is not more than one. This indicates that the average assets of companies listed on the IDX they did not heavily finance.

The results of the coefficient of determination of firm value in the table above show an R value of 0.956 and a coefficient of determination (R²) of 0.912 or 91.2%, which means that the variables ID, FS, ROA, CR, EGR, and LEV can simultaneously determine the magnitude of the change. TOBINS'Q is 91.2%, while the remaining 8.8% changes in TOBINS'Q are influenced by other factors not discussed in this study.

The independent variables are stated together to have a significant simultaneous effect on TOBIN'S Q if the significance value is below 0.05 or 5%. From the ANOVA, most of the regression models have independent variables that simultaneously affect the dependent variable.

Based on Table 7 the results of the t-test show that the FS and ROA variables are significant at the 1% level of the TOBIN'S Q variable. The FS control variable has a significantly positive effect on TOBIN'S Q with a significance value of 0.002. Meanwhile, ROA has a significant negative effect on TOBIN'S Q with a significance value of 0.000. Table 7 also shows that the EGR variable has a positive effect on firm value with a significance value of 0.07 at a significance level of 10%. This shows that the higher the earning growth rate, the higher the firm value.

In addition, the results of the partial test show that the independent variable, namely ID, has no significant effect on the TOBIN'S Q variable because the independent variable has a significance level above 0.05. The results of the partial test also show that other control variables, namely CR and EGR, have a positive regression coefficient value, but have no significant effect on the TOBIN'S Q variable because each of these variables has a significance level above 0.05. The LEV variable has a negative but not significant regression coefficient.

Table 4
Descriptive Statistics

	N	Min.	Max.	Mean	Std. Dev
Tobins'Q	567	0,078	3562,477	108,96	310,37
InformationDigitalization	567	3,000	16,000	10,632	1,839
Firm Size	567	22,602	33,454	28,307	1,818
Profitability's	567	-7,883	0,599	-0,043	0,421
Liquidity	567	0,002	410,241	5,048	27,109
Earnings Growth Rate	568	-2,316	22,573	-0,113	1,072
Leverage	568	-39,325	114,289	1,654	7,331

Source: Processed Data

Table 5
Coefficient of Determination Test Results (R^2)

R	R Square	Adjusted R Square
0,956	0,913	0,912

Source: Processed Data

Table 6
F-test Results

Model	df	Mean Square	F	Sig.
Regression	6	170400	983,2	0,000
Residual	560	95538		
Total	566			

Source: Processed Data

Table 7
T-test Results

Variable	B	t	Sig.
Constant	-1607.29	-2.819	0.005
ID	-19.7372	-0.944	0.345
FS	65.84792	3.096	0.002
PROFIT	-1916.83	-75.811	0.000
LIQ	0.378	0.552	0.580
EGR	61.030	1.813	0,070
LEV	-4.678	-0.952	0,341

Source: Processed Data

The Effect of Information Digitalization on Firm Value

Based on the results of hypothesis testing, it shows that digitizing information has no effect on firm value. The large number of website content items cannot affect the size of the company's value. The website is a means of conveying company information. Many factors influence the company's choice in delivering information content on the website. In addition, each business line has different special characteristics so the information that needs to provide is also different. However, the lack of delivery of information needed by external parties such as creditors and investors makes digitalization have no effect on company value (Andriyani & Mudjiyanti, 2017).

This result of this study are in line with Jihad (2021), where internet financial reporting has no effect on firm value. This is because the content on the company's website does not affect the value of the company. The company did not maximize the content components on the company's website properly by disclosing it through the company's official website. Therefore, items or contexts in digitalization have no effect on company value.

According to Amilia (2009), companies have not optimally utilized the facilities provided on the website, both for technology components and user support, many companies are unable to provide information for investors, most of the information presented on the company's website is about the products or services produced and many companies do not update the information presented.

Table 8
T-test Results Based on Industry

Variable	B	t	Sig.
Manufacturing			
Constant	-1586.36	-2.182	0.031
ID	-39.675	-1.706	0.090
FS	78.221	2.915	0.004
PROFIT	146.262	0.600	0.550
LIQ	-0.344	-0.158	0.875
EGR	-206.376	-1.389	0.167
LEV	-2.168	-0.709	0.480
Retail (Trading)			
Constant	1666.67	2.752	0.008
ID	-12.499	-0.662	0.511
FS	-46.98	-2.031	0.048
PROFIT	321.55	1.197	0.237
LIQ	-17.912	-1.426	0.160
EGR	-5.857	-0.524	0.603
LEV	-4.441	-0.439	0.663
Services			
Constant	-874.26	-1.193	0.233
ID	-19.314	-0.734	0.463
FS	41.755	1.573	0.116
PROFIT	-19.660	-1.863	0.000
LIQ	0.453	0.595	0.552
EGR	232.013	2.731	0.007
LEV	-7.832	-0.777	0.438

Source: Processed Data

Dyetzkwoska's research (2014) found that only a few companies make disclosures through websites. In line with this, Lodhia et al (2004) revealed that company reporting via the internet is growing but these companies do not optimally use the internet to disclose financial information to shareholders. This shows that in general, companies that perform digitalization optimally are still very limited. Therefore, this can affect research results where digitalization has no effect on company value.

Additional Analysis

The following additional analysis aims to test the robustness of the main analysis results by classifying companies by industry, namely manufacturing, retail, and services.

The results of the robustness test show that in each industry, digitalization of information has no effect on firm value. However, it needs further observation at the 10% level, in the manufacturing industry; digitalization has a significant value below 10%. This indicates that the

digitization of information in the manufacturing industry has an influence on firm value. This is because there are items related to operations such as inbound and outbound logistics that exist in manufacturing companies so that they are able to provide additional information to investors. However, the influence is negative. The digitization of the company's information indicates that there is operational information or explanation. They did not disclose them on the website but did not make it easier for investors to understand the company's operations. Therefore, the overall results show that digitizing information has no effect on firm value. The results of the robustness test also show the same thing in every industry with a significant 5% that the digitization of information has no effect on company value. This is due to the lack of utilization that exists in the company, both the available technology and the intellectual capital of the company.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

It can be concluded as the following. On one hand, Information digitalization has no effect on the value of companies listed on the Indonesia Stock Exchange in 2020. On the other hand, when a robustness test is carried out by dividing into three industries, namely manufacturing, trade and services, manufacturing companies have an influence on firm value, while trade and service industry companies have no effect. Companies have not optimally utilized the facilities provided on the website, both for technology components and user support. Besides that, many companies are unable to provide information for investors. The website is a means of delivering company information. However, this is because many companies are lacking in conveying information items needed by outside parties. For control variable, firm size and earnings growth rate has a positive effect on firm value. Profitability has a negative effect on the value of companies listed on the Indonesia Stock Exchange in 2020. Current ratio and leverage have no effect on the value of companies listed on the Indonesia Stock Exchange in 2020.

There are limitations in collecting the data, namely from the company's website, which can change at any time and it does not accurately reflect the dependent variable so that for further research, digitalization information can use more consistent, non-subjective, and precise measuring tools related to the time of data collection, such as Google Trends. Google Trends allows users to select a time range, with the date furthest since 2004, and the data is updated daily. The user can also select the frequency interval for the observations, for example daily, weekly or monthly search volume. For issuers, it is better to be more open to company information because the more disclosure items are disclosed, the more investors know more information about the company so that investors can make judgments in making decisions.

REFERENCE

- Almilia, L. S. (2009). Analisis Komparasi Indeks Internet Financial Reporting pada Website perusahaan Go Publik Indonesia. *Seminar Nasional Aplikasi Teknologi Informasi Yogyakarta*.

- Anderson, J. C., Narus, J. A., & Van Rossum, W. (2006). Customer Value Propositions in Business Markets. *Harvard Business Review*, 84(3), 1-8.
- Andriyani, R., & Mudjiyanti, R. (2017). Pengaruh Tingkat Profitabilitas, *Leverage*, Jumlah Dewan Komisaris Independen Dan Kepemilikan Institusional Terhadap Pengungkapan *Internet Financial Reporting* (IFR) di Bursa Efek Indonesia. *Kompartemen: Jurnal Ilmiah Akuntansi*, 15(1).
- Bai, X & Gao, L. (2014). A Unified Perspective on the Factors Influencing Consumer Acceptance of Internet of Things Technology. *Asia Pacific Journal of Marketing and Logistics*.
- Belvedere, V., Grando, A., & Bielli, P. (2013). A Quantitative Investigation of the Role of Information and Communication Technologies in the Implementation of a Product-Service System. *International Journal of Production Research*, 51(2), 410-426. <https://doi.org/10.1080/00207543.2011.648278>
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32(1-3), 237-333.
- Certo, S. T. (2003). Influencing Initial Public Offering Investors with Prestige: Signaling With Board Structures. *Academy of Management Review*, 28(3), 432-446.
- Deegan, Marilyn and Simon Tanner. (2002). *Digital Futures: Strategies for the Information age*. Library Association Publishing
- Dyezkowska, J. (2014). Assessment of Quality of Internet Financial Disclosures Using a Scoring Sys. *Accounting and Management Systems*.
- Jihad, Muhammad Farhan (2021) Pengaruh Pengungkapan Internet Finance Reporting dan Board of Director Terhadap Nilai Perusahaan. *Skripsi*. Universitas Muhammadiyah Malang
- Kirmani, A., & Rao, A. R. (2000). No Pain, No Gain: A Critical Review of the Literature on Signaling Unobservable Product Quality. *Journal of Marketing*, 64(2), 66-79.
- L'opez-Arceiz, F. J., Torres, L., & Bellostas, A. J. (2019). Is Online Disclosure the Key to Corporate Governance?. *Online Information Review*, 43(5), 893-921.
- Lindenberg, E. B., & Ross, S. A. (1981). Tobin's Q Ratio and Industrial Organization. *Journal of Business*, 54(1), 1-32.
- Lodhia, S. K. (2004). Corporate Reporting on the Internet in Australia: An Exploratory Study. *Australian Accounting Review*.
- Martín-Peña, M. L., Sánchez-López, J. M., & Díaz-Garrido, E. (2020). Servitization and Digitalization in Manufacturing: The Influence on Firm Performance. *Journal of Business and Industrial Marketing*, 35(3), 564-574. <https://doi.org/10.1108/JBIM-12-2018-0400>.

-
- Narsa, I. M., & Pratiwi, F. F. (2014). Internet Financial Reporting, Pengungkapan Informasi Website, Luas Lingkup Pelaporan Internet, dan Nilai Perusahaan. *EKUITAS (Jurnal Ekonomi dan Keuangan)*, 18(2), 259-273.
- Novitasari, S. (2017). Pengaruh Internet Financial Reporting Terhadap Nilai Perusahaan. *Skripsi*. Universitas Sanata Dharma.
- Pinusa, R. (2018). Digitalisasi Informasi Ilmiah: Problematika dan Solusinya. *Warta Cendana*, 11(1), 26-31.
- Parasetya, B., & Kurniawan, B. (2021). Pengaruh Pengungkapan Informasi Keuangan Melalui Web Perusahaan Terhadap Nilai Perusahaan. *Jurnal Ekonomi, Manajemen dan Akuntansi*, 2(1), 13-18.
- Puspita, A. E. (2014). Pentingkah Pengungkapan Intellectual Capital Dalam Meningkatkan Nilai Perusahaan? *Syariah Paper Accounting FEB UMS*, 205-210.
- Salvi, A., Vitolla, F., Rubino, M., Giakoumelou, A., & Raimo, N. (2021). Online Information on Digitalisation Processes and its Impact on Firm Value. *Journal of Business Research*, 124(June), 437-444.
- Spence, Michael. 1973. Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Sukoco, H., & WAHYUDI, S. (2013). Analisis Pengaruh *Debt to Equity Ratio*, *Profitabilitas*, *Firm Size*, dan Likuiditas Terhadap Nilai Perusahaan Melalui Mediasi *Dividend Payout Ratio* (Studi Pada Industri Manufaktur di Bursa Efek Indonesia Periode Tahun 2009-2011). *Doctoral Dissertation*. UNDIP: Fakultas Ekonomika dan Bisnis).
- Sugito, T. K., Nugrahanti, Y. W., & Kristanto, A. B. (2013). Pengaruh Pengungkapan Terhadap Nilai Perusahaan (Studi pada Perusahaan Manufaktur di Bursa Efek Indonesia Tahun 2012). *Simposium Nasional Akuntansi XVI*.
- Widari, P. P., Saifi, M., & Nulaily, F. (2018). Analisis Internet Financial Reporting (IFR) (Studi Pada Perusahaan Manufaktur Yang Go Public di Indonesia, Singapura, dan Malaysia. *Jurnal Administrasi Bisnis*, 56(1), 90-99
- Yang, S., Liu, Y., & Wu, X. (2021). Effects of Social Media Engagement and Advertising on Firm Value of Tourism and Hospitality Companies. *Journal of Hospitality and Tourism Research*, 45(8), 1417-1439. <https://doi.org/10.1177/10963480211015361>.
- Yasar, B., Martin, T., & Kiessling, T. (2020). An Empirical Test of Signalling Theory. *Management Research Review*, 43(11), 1309-1335. <https://doi.org/10.1108/MRR-08-2019-0338>.

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