

Consequences of Implementing Risk Management and Good Corporate Governance on Digital Transformation and Corporate Value of Public Companies in Indonesia

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Abstract. The aim of this research is to analyze the application of risk management and good corporate governance (GCG) to digital transformation and corporate value in companies listed on the Indonesia Stock Exchange in the banking sector. The study uses secondary data from banking companies over a five-year period (2019–2023) with a total of 215 observations. The analysis technique employed is a partial structural model using SEM-PLS. Research results during the 2019–2023 period indicate that banking companies' risk levels experienced fluctuations. The average Business Risk (BR) reached **Rp 2.517.025.905**, showing an upward trend, while the average Financial Risk (FR) was **12.22**, meaning that a **Rp 1** change in profit before tax would trigger a **Rp 12.22** change in operating profit. These fluctuations reflect business and financial conditions marked by uncertainty amid rapid technological shifts. The assessment of good corporate governance shows that banking companies have met regulatory standards, as the sector is strictly supervised by the Financial Services Authority (OJK) and Bank Indonesia. Meanwhile, the use of digital banking indicators reached an average of **±95%**, measured through 21 Cisco Consulting indicators, indicating that nearly all banking companies have implemented digital transformation. Furthermore, digital transformation carried out by banking companies provides positive signals to investors. The results confirm that risk management and GCG significantly influence digital transformation, and digital transformation subsequently has a significant effect on corporate value in banking companies listed on the Indonesia Stock Exchange. Consequently, the primary challenge for these institutions lies in translating digital adoption into measurable operational efficiency to ensure that technology investments yield tangible returns rather than merely increasing capital expenditure.

1 Introduction

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phenomenon of digital use in human life in the industrial revolution 4.0 is increasing sharply. This phenomenon can be found in various people's daily lives, such as digital computer technology, digital games, digitization of the use of currency (e-money), use of digital media (e-media) and others. Humans will even live in global uncertainty, therefore humans must have the ability to predict a future that is changing very quickly [1].

The term industrial revolution 4.0 was first introduced at the 2011 Hannover Fair in Germany. The large exhibition activities of the 2011 Hannover Fair seemed to reopen the evolution of the industrial revolution [2]. Technological advances allow automation in almost all fields. New technologies and approaches that combine the physical, digital and biological worlds will fundamentally change the patterns of life and human interaction in Industry 4.0 as a phase of the technological revolution changing the way human activities are scaled, scoped, complexified and transformed from previous life experiences. With increasingly advanced developments, society is required to take part in increasing Indonesia's economic growth through investment activities in the capital market [1].

The performance of public companies is reflected in the company's share price, which is a reflection of the meeting between supply and demand for these shares on the stock exchange. An increasing share price shows that investors give appreciation to the company or a positive investor image and vice versa. The rapid development of capital markets has an impact on increasing the attractiveness of investing in securities, which ultimately encourages many investors to invest their funds in shares. Intangible things such as technology, innovation and digitalization also determine the value of the company, so that corporate value is not only obtained from tangible things [3]. Digitalization is a managerial tool to facilitate organizational development by optimizing business models and reducing the level of risk [4]. This rapid development is supported by a strong performance of the capital market. Throughout 2023, the Indonesia Composite Index (IHSG) increased by 5.24%. The number of Initial Public Offerings (IPOs) in Indonesia reached 79 issuers in 2023, placing Indonesia sixth in the world, contributing approximately 6% of total global IPOs. In terms of fundraising value, Indonesia recorded US\$ 3.6 billion (equivalent to Rp 54.14 trillion), making it the ninth-largest IPO market globally. This increase also represented the highest year-to-date (ytd) growth in the ASEAN region at 9.3%.

Table 1 shows sectoral stock trading data. On the Indonesian Stock Exchange there are 11 stock sectors traded. Based on stock trading volume, it can be seen that the largest is the technology sector with a trading volume of 5,005.84 million shares. Based on the frequency of stock trading, the highest is the financial sector with a frequency in 2023 of 3,336.87 thousand times. Referring to this data, it is very important to study the financial industry or sector, especially the banking sector.

Table 1. Sectoral Share Trading on the Indonesian Stock Exchange

Sectoral	2023 Average			Market Capitalization	
	Volume (million)	Value (Rp Billion)	Freq (Thousand)	Value (Rp)	%
IDX Sector Energy	2,356.29	1,287.61	152.52	1,254,606,969,936,310	13.19
IDX Sector Basic Materials	1,296.30	1,299.98	126.93	988,204,151,807,908	10.39
IDX Sector Industrials	607.90	622.65	73.30	432,380,851,722,586	4.55
IDX Sector Consumer Non-Cyclicals	1,259.74	756.12	124.71	1,189,842,683,644,440	12.51
IDX Sector Consumer Cyclicals	1,878.76	777.44	137.37	370,013,608,461,055	3.89
IDX Sector Healthcare	578.71	348.05	42.55	285,630,542,755,109	3.00

IDX Sector Financials	1,546.32	3,335.87	145.06	3,427,205,934,838,240	36.03
IDX Sector Properties & Real Estate	1,457.76	252.80	91.94	256,698,936,896,866	2.70
IDX Sector Technology	5,005.84	657.04	90.52	396,543,666,107,969	4.17
IDX Sector Infrastructures	776.93	756.57	75.44	860,244,693,904,753	9.04
IDX Sector Transportation & Logistic	663.95	123.21	76.24	49,992,842,359,082	0.53

Source: [5] (processed 2024)

Based on Table 2, there are four banking companies whose shares have the largest capitalization on the Indonesian Stock Exchange. The banking sector is the sector most affected by IT developments. Therefore, banks are currently competing to provide the best services, especially digital-based ones, the better the digital services, the more consumers or customers will like them..

Table 2. Companies with the Largest Market Capitalization March 2023

No	Code	Company name	Number of Shares (Shares)	Market Capitalization (Rp Billion)
1	BBCA	Bank Central Asia Tbk.	122.042.299.500	1.067.870.121
2	BBRI	Bank Rakyat Indonesia (Persero) Tbk.	150.043.411.587	709.705.337
3	BYAN	Bayan Resources Tbk.	33.333.335.000	692.500.035
4	BMRI	Bank Mandiri (Persero) Tbk.	46.199.999.998	477.015.000
5	TLKM	Telkom Indonesia (Persero) Tbk.	99.062.216.600	402.192.599
6	ASII	Astra International Tbk.	40.483.553.140	242.901.319
7	TPIA	Chandra Asri Petrochemical Tbk.	86.511.545.092	202.437.016
8	BBNI	PT Bank Negara Indonesia (Persero) Tbk	18.462.169.893	172.621.288
9	UNVR	Unilever Indonesia Tbk.	38.150.000.000	165.952.500
10	HMSP	HM Sampoerna Tbk	116.318.076.900	130.857.837

Source: [5] (processed 2024)

The important role of digital transformation is related to the profits obtained by the company [6]. The increasing complexity of business caused by various factors encourages banking companies to disclose higher levels of information and use digital-based information systems. The information disclosed provides an important role for decision making for all parties related to the company [7]. Hasil penelitian [8], [9], [10], [11], [12], [13], [14] shows that risk has a significant influence or relationship with digital transformation. Different results are shown by research [15] where risk has no significant effect on digital transformation.

Digital transformation also supports access to international markets so that it can help companies develop their business. Digital transformation has a positive effect on company performance, as research shows. states that companies that use digital technology mostly show better performance in terms of revenue and market value. Digital transformation can improve the product/service offering process and speed up service and operational processes.

Research on the relationship between digital transformation and corporate value shows many inconsistencies in results and diversity of indicators. Based on the results of previous research which shows inconsistencies in research results and the variety of indicators used so that there is still a research gap, this research seeks to prove again the relationship between risk management and good corporate governance with digital transformation, and corporate value with banking company objects in the 2019-2023 period.

2 Literature Review

Risk is defined as the potential variability in future cash flows. Risk can be grouped into two types, namely pure risk and speculative risk, where pure risk is only having one possibility of loss and no possibility of profit, while speculative risk is the possibility of a loss in addition to the possibility of making a profit. Business risk and financial risk are risks that must be considered by the company [1]. Risk in general is the probability of an event with its consequences. Company risk itself is generally divided into two, namely business risk and financial risk. Business risk is meant by a situation where the company is unable to cover operating costs. Financial risk is a situation where a company is unable to cover its financial costs.

The results of previous research on the relationship between risk and digital transformation show that risk management has a correlation with digital transformation. The increasing complexity of business caused by various factors encourages banking companies to diversify bank risks, which is one of the main methods for sustainable development of banks in the global economy. In this situation, diversification of risk management requires new strategies in the context of digitalization. Risk diversification of the loan portfolio allows one to increase profits and reduce the overall risk of the bank [14]. Risk management is one component that is quite important to consider in managing a bank, for this reason the company must think of ways to mitigate various risks that could potentially occur in the future [11]. In line with digitalization and rapid changes in the financial industry, there is an urgent need to strengthen risk management in banking.

Agency theory according to explains that the relationship between company management as agent and company owner as principal. Agency theory states that if there is a separation between the owner as the principal and the manager as the agent who runs the company, agency problems will arise because each party will always try to maximize its utility function. Corporate Governance or GCG in general is a system of company control and regulation that can be seen from the relationship mechanisms between various parties managing the company. Measuring Good Corporate Governance can use managerial ownership, namely company shares owned by the management who manages the company. With share ownership by managers, managers are expected to manage and run the company as well as possible and act in accordance with the wishes of the principals in order to increase the effectiveness of the company. Another measure of Good Corporate Governance is the existence of independent commissioners, namely members of the board of commissioners who do not have financial, management, share ownership and/or family relationships with members of the Board of Commissioners, members of the Board of Directors and/or controlling shareholders or with companies that might hinder or hinder his position to act independently in accordance with GCG principles. The audit committee can also be one measure in assessing a company's Good Corporate Governance. The existence of an audit committee is one of the criteria for Good Corporate Governance.

Implementation of governance disclosure through Good Corporate Governance can lead to a higher increase in market value of returns on invested funds. Increasing the supervisory function as an indicator of Good Corporate Governance can increase the costs that must be borne by the company, but investors' rights will be protected and provide a good perception

in their eyes.. The relationship between shareholders, the board of directors and company management is part of corporate governance activities which aim to ensure that this relationship is able to maximize shareholder wealth. The audit committee is proven to influence the company's market value. On average, companies with good governance tend to achieve better market value and lead to better financial results.

The adoption of digital technology has the potential to increase corporate value by increasing productivity through increased coordination and work along with high efficiency. The presence of digital banking or electronic banking facilities will reduce operational costs and increase bank profitability, but will still provide convenience to customers through ease and speed in carrying out transactions. Digital banking is a form of financial technology that has the strength of the level of security for customer data and funds that must be increased to minimize the potential for misuse (fraud) as well as support for strengthening and equalizing internet access in the regions. Digitization of decision-making processes and various operations helps maintain the customer base and improve banking business using new electronic channels and online lending. In general, this contributes to increasing the efficiency and competitiveness of banks, as well as reducing time for customer service [14].

For management, the value of a company can provide information about what investors think about the company's past performance and the company's prospects in the future. The implementation of digital transformation can lead to a higher increase in market value over returns on invested funds. Banking companies are required to manage the resources they have as closely as possible to produce products/services in order to improve the company's financial performance and increase the prosperity and welfare of shareholders. A high corporate value will attract more attention and potential investors to buy shares.

In order to reduce uncertainty, companies try to provide information to external parties. The company's urge to provide information is because there is information asymmetry between the company and outside parties because the company knows more about the company and its future prospects than outside parties (investors, creditors). Signal theory explains shareholder perceptions of the company's future growth opportunities. Information will be provided by company management to shareholders to provide signals to investors which will influence potential investors' responses to the company. This signal is in the form of information that explains management's efforts to realize the owner's wishes. Signal theory was first introduced which is the basis for the importance of company-related information for investors. Good implementation of good corporate governance is a good signal for the Company. Signal theory explains why companies have an incentive to provide financial report information to external parties.

3 Methodology

This study employs an explanatory research design to test the proposed hypotheses. The final sample consists of 43 banking companies observed over a five-year period (2019–2023), resulting in a total of 215 observations (N=215\$). This sample size is statistically sufficient for SEM-PLS analysis, as it exceeds the minimum requirements typically suggested by the 'ten-times rule' or power analysis, ensuring the reliability and validity of the structural model paths. This research is explanatory research which aims to test the research hypothesis.

Risk management and good corporate governance are exogenous variables in this research, while digital transformation and corporate value are endogenous variables. The risk management variable is proxied by business risk and financial risk, the good corporate governance variable is proxied by the audit committee, independent commissioner and managerial ownership, the digital transformation variable is proxied by the digital index from Cisco consulting criteria, the corporate value variable is proxied by share price and excess value. Figure 1 is a research model using a structural model.

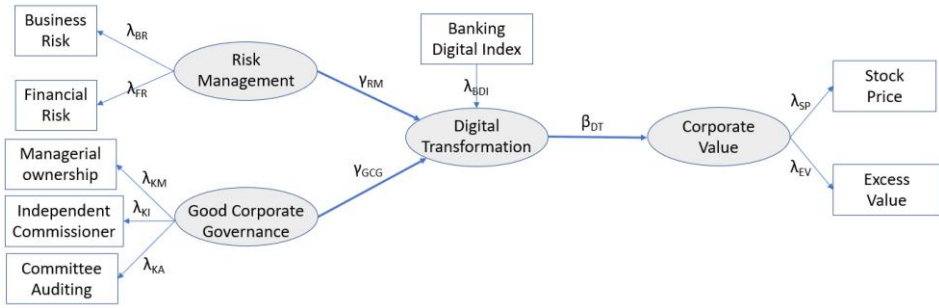


Fig. 1. Concept of Research Structural Model

4 Result and Discussion

4.1 Findings

Risk is defined as the potential variability in future cash flows. The testing stages in SEM PLS analysis are outer and inner model testing and hypothesis testing. Testing of the initial structural model shows that three proxy variables, namely financial risk, managerial ownership and stock prices, show an outer loading value smaller than 0.5, so they are excluded from the structural model. Table 3 shows the improved outer model test.

Table 3. Outer Model Test

Variable	Proxy	Outer Loading	Pvalue Outer Loading	Pvalue Outer Weight	AVE	Cross Loading	Result	Composite Reliability	Cronbach's Alpha	Result
Risk Management	Business Risk	1.000	0,000	0,000	1.000	1.000	Valid	1.000	1.000	Reliable
Good Corporate Governance	Independent Commissioner	0.882	0,000	0,000	0.689	0.882	Valid	0.815	0.857	Reliable
	Committee Audit	0.775	0,000	0,000		0.775	Valid			Reliable
Digital Transformation	Digital Index	1.000	0,000	0,000	1.000	1.000	Valid	1.000	1.000	Reliable
Corporate Value	Excess Value	1.000	0,000	0,000	1.000	1.000	Valid	1.000	1.000	Reliable

Based on Table 1, testing the outer model with the convergent validity test shows that the outer loading value and AVE value of the variable are greater than 0.5. Testing the outer model with discriminant validity shows that the proxy cross loading value for each variable is greater than the cross loading value for the other variables so that the research model is valid. The results of the outer model reliability test through the composite reliability value and Cronbach's alpha value for all variables are greater than 0.6 so the research model is reliable.

Testing the inner model through the R2 and Rm2 values resulted in R2 digital transformation of 0.246, meaning that the influence of risk management of banking companies and good corporate governance of banking companies on digital transformation of banking companies was 24.6%. R2 corporate value is 0.679, meaning that the influence of

banking company digital transformation on banking company corporate value is 67.9%. The Rm2 of the research model is 0.758, meaning that the research structural model is a substantial model. After testing the outer and inner models, hypothesis testing can be carried out with the results in Table 4.

Table 4. Hypothesis Testing Results

Variable Relationships	Hypothesis	Relationship Coefficient	Probability Values	Result
Risk Management - Digital Transformation	1	-0.394	0.000	Significant influence
Good Corporate Governance – Digital Transformation	2	-0.268	0.000	Significant influence
Digital Transformation – Corporate Value	3	-0.824	0.000	Significant influence

The results of data analysis show testing the effect of risk management on digital transformation with a P value of 0.000, which is smaller than α (0.05). These results show that hypothesis 1 is accepted, meaning that risk management has a significant effect on digital transformation in banking companies listed on the Indonesia Stock Exchange in the 2019-2023 period. The relationship coefficient value of -0.824 indicates that risk management has a negative or opposite direction to digital transformation. If companies want to reduce risk with good risk management, banking companies need to carry out digital transformation. Risk management which has a significant influence on digital transformation refers to the Resources Based View theory. In order to reduce the emergence of losses due to business risks and financial risks, the company will use various information technologies that will enable the company to have a good level of digitalization. The existence of several bank business activities that have increased, including those outside of lending activities, has resulted in this increase, making Indonesian banks start to be faced with various kinds of complex risks, so that banks are required to play an important role in increasing the need to implement risk management and minimize risks related to banking business activities.

Therefore, in the context of banking risk management, various efforts are made to minimize the negative effects of future uncertainty. The results of this research which show that risk management has a significant effect on digital transformation supports research [8], [9], [10], [11], [12], [13], [14].

The results of testing the effect of good corporate governance on digital transformation with a P value of 0.000, which is smaller than α (0.05). These results show that hypothesis 2 is accepted, meaning that good corporate governance has a significant effect on digital transformation in banking companies listed on the Indonesia Stock Exchange in the 2019-2023 period. The relationship coefficient value of -0.268 indicates that good corporate governance has a negative or opposite direction to digital transformation. If banking companies that have carried out digital transformation are demonstrating companies with good governance because all information is revealed and can be accessed by the public. All companies have the goal of making a profit because it is an indicator of a company's performance. The company's goals will be related to stakeholder theory and trade-off theory. Good company management so that it can generate profits is related to the application of good corporate governance principles as well. In order to support the digital transformation carried out by a company, it is necessary to implement good governance within the company (good corporate governance). Implementation of governance disclosure through Good Corporate Governance can lead to a higher increase in market value of returns on invested funds. Increasing the supervisory function as an indicator of Good Corporate Governance

can increase the costs that must be borne by the company, but investors' rights will be protected and provide a good perception in their eyes.. The research results show that good corporate governance has a significant effect on digital transformation. in line with the research results.

The results of testing the effect of digital transformation on corporate value with a P Value of 0.000, which is smaller than α (0.05). These results show that hypothesis 3 is accepted, meaning that digital transformation has a significant effect on corporate value in banking companies listed on the Indonesia Stock Exchange in the 2019-2023 period. The relationship coefficient value of -0.394 indicates that good corporate governance has a negative or opposite direction to digital transformation. If a banking company has carried out digital transformation, this will be a good signal for parties related to the company because it is a positive signal. states that capabilities or resources, apart from being one of the determinants of a company's competitive advantage and superior performance, are also one of the determinants of a company's strategy in carrying out its operations. The digitalization process of banking companies in Indonesia shows an average figure of $\pm 95\%$, meaning that almost all banking companies in the research sample have used digital technology with 19 digitization indicators out of the 21 indicators used as measurements. According to [36] Digital banking is a form of financial technology that has many strengths. A high corporate value will attract more attention and potential investors to buy shares. The regulator, namely the Financial Services Authority, emphasized that the presence of digital banking services supported by developments in technology, social media and community lifestyles provides benefits for the banking industry, including generating income from fee-based income, reducing transaction costs, developing business, and increasing trust and customer loyalty. The results of this study are in line with the research results which shows that digital transformation of banking companies has no significant effect on corporate value.

4.2 Descriptive Analysis

The calculation results of the variables provide numerical data that can be interpreted as descriptive analysis to support the discussion of the research findings. The following is a recapitulation of the calculation results for the research variables.

4.2.1 Risk Management Variable

The Risk Management (RM) variable represents the risk exposure borne by the company due to its operational activities, measured by Business Risk (BR) and Financial Risk (FR). The calculation results for Business Risk (BR) over the 2019–2023 period indicate an average value of 2,517,025,905.0000 with a standard deviation of 2,798,440,774.00000. The considerable difference between the standard deviation and the mean suggests a wide spread in the data. During this period, the trend of business risk tends to be increasing. This fluctuation is linked to the impact of the COVID-19 pandemic, which caused revenue fluctuations in almost all sectors in Indonesia, consequently affecting the Earnings Before Interest and Tax (EBIT) of large-scale banking companies. Meanwhile, the average value for Financial Risk (FR) during the 2019–2023 period is 12.2292. This value signifies that a change in profit before tax (EBT) of Rp 1-, will result in a change in operating profit (EBIT) of Rp 12.22. Unlike business risk, the financial risk trend tends to be decreasing.

4.2.2 Good Corporate Governance Variable

The Good Corporate Governance (GCG) variable is based on corporate governance principles aimed at creating a conducive relationship among stakeholders, measured by the

Audit Committee (KA), Independent Commissioner (KI), and Managerial Ownership (KM). The average value of the Audit Committee (KA) throughout the 2019–2023 period is 3.73. This means the average number of internal auditors appointed in the 45 companies is approximately 3 individuals. The existence of the Audit Committee serves as a signal to investors that the company's finances and activities are strictly monitored.

The average value of the Independent Commissioner (KI) is 2.5407, suggesting that all banking companies in the sample possess independent commissioners. The presence of KI indicates to investors that there is a commissioner from outside the internal structure overseeing the company's finances and operations. The average Managerial Ownership (KM) during 2019–2023 is very low at 0.0092186. This low level of 0.009 percent managerial stock ownership is considered relatively minor for the banking sector. Because banking companies are strictly regulated by the Financial Services Authority (OJK) and Bank Indonesia (BI), the potential for agency conflict between owners and managers is almost non-existent.

4.2.3 Digital Transformation Variable

Digital Transformation (DT) is measured by the proportion of digital services utilized by banking companies compared to the total 21 digital services criteria provided by Cisco Consulting. The descriptive results show that the average DT implementation during the 2019–2023 period is 0.6549. Specifically, in 2023, the value reached 0.95 (95%). This suggests that the average banking company listed on the Indonesia Stock Exchange uses approximately 19 out of the total 21 digital banking services indicators, demonstrating a significant and mandatory adoption of digital technology.

4.2.4 Corporate Value Variable

Corporate Value (CV) reflects investor perception of the company, measured by the Stock Price (SP) ratio and the Excess Value (EV) ratio.

The average Stock Price (SP) during the 2019–2023 period is 1,337.5491. This value indicates that investors generally hold a positive perception regarding the company's stock price. Despite the drop in stock indices globally due to the COVID-19 pandemic, investors-maintained confidence that the financial condition and stock prices of the banking sector companies would improve. Similarly, the average Excess Value (EV) during the same period is 135,403,429,800,000.0000. This highly positive value confirms that investor perception regarding the company's financial health and value remains generally positive. The positive perception was sustained even during the global market downturn, reflecting confidence in the banking sector's resilience.

5 Conclusion

Results of data analysis: The risk management conditions of banking companies listed on the Indonesia Stock Exchange for the 2019-2023 period fluctuate because the business and financial situation shows uncertainty with the emergence of various impacts due to technological changes, especially those related to fintech. The value of good corporate governance of banking companies listed on the Indonesia Stock Exchange for the 2019-2023 period is in accordance with applicable regulatory criteria, meaning that banking companies are one of the corporate sectors regulated by various rules by regulators so that all banking companies have almost no potential for emergence. agency conflict so that it becomes a good signal for the company. Digital transformation, represented by 21 digital banking indicators from Cisco Consulting, shows that almost all banking companies listed on the Indonesia

Stock Exchange for the 2019-2023 period have an average number of digital banking indicators used in banking companies of $\pm 95\%$. All banking companies will be obliged to follow changes in information technology developments, especially digital-based ones. Risk management which has a significant influence on digital transformation refers to risk theory which explains the need to anticipate conditions of uncertainty that occur in every investment activity through the use of digital technology in banking. Based on the resource based view theory shows the link between the competitive advantages of a company if they have digital technology in order to minimize losses arising from the business and financial activities of banking companies. Increasing business risks and financial risks will be anticipated by banking companies with the increased use of digital technology which has lower costs, this is because management will try to show that company management remains in accordance with the principles of transparency, accountability, responsibility, independence, fairness and equality. Good corporate governance which has a significant effect with a negative or opposite direction to digital transformation proves the signal theory where information will be provided by company management to shareholders to provide signals to investors which will influence potential investors' responses to the company. This signal is in the form of information that explains management's efforts to realize good governance and corporate social responsibility. Without increasing the number of managerial ownership, independent commissioners and audit committees, banking companies are still replacing them by turning to digital transformation to improve good governance.

The era of society 5.0, which is a development of the industrial revolution 4.0, has become commonplace in banking companies, because every banking company is obliged to follow changes in the development of digital-based information technology. The adoption of digital technology has the potential to increase corporate value by increasing productivity through increased coordination and work along with high efficiency. The primary challenge for Indonesian banks is ensuring that technology leads to realized efficiency rather than just increased capital expenditure. Digital transformation has a significant effect on corporate value, showing that this information is considered an important indicator for investors and business people in making investment decisions. If the information is positive, it means that investors will respond positively and be able to differentiate between quality companies and those that are not, so that share prices will be higher and corporate value will increase. However, if investors give a negative signal, it indicates that the investor's desire to invest is decreasing, which will affect the decline in corporate value.

Despite its contributions, this study has several limitations. First, because the data focuses on the 2019–2023 period, the findings may not be universally generalizable to all banking institutions. Future researchers could refine these results by categorizing banks based on their core capital, allowing for more specialized and actionable recommendations. Furthermore, the inclusion of the COVID-19 pandemic within a single continuous timeline may obscure specific market trends. The high volatility during this period suggests that market responses were not uniform. Subsequent studies should consider using a comparative analysis, separating the timeline into distinct pre-pandemic, pandemic, and post-pandemic phases to capture a more granular view of investor perceptions.

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