# Will Digital Disclosure Affect Corporate Stocks? - Based on Stakeholders' Cognition

## Qiong Sun, Yaqi Shi*

*Beijing Union University*
*No. 97, North Fourth Ring East Road, Chaoyang, Beijing 100101, China*
*E-mail: sunqiong  buu@yeah.net; *qs7ynm@163.com*
*Corresponding author**

*Digital transformation has given enterprises new development power, so can digital transformation disclosure indirectly enhance enterprise value and then affect enterprise stocks? This study collects the posts related to digital transformation published by 34 listed companies in China's top 100 in the four financial newspapers and periodicals from 2018 to 2021 as a sample, takes the disclosure of digital transformation of three enterprises as explanatory variables, and makes an empirical analysis on the impact degree of stocks of different main enterprises from the perspective of stakeholders based on hypocrisy theory and organizational facade theory. Research shows that different types of hypocrisy strategies will have different effects on corporate stocks. Among them, digital transformation action disclosure has a significant positive impact on enterprise stocks, speech and decision disclosure have a negative impact on enterprise stocks, and speech disclosure has a more significant impact than decision disclosure. In addition, according to the heterogeneity analysis of enterprise nature and industry category, the results show that non-state-owned enterprises and energy enterprises are more sensitive to digital transformation, have a stronger willingness to actively transform, and have a more significant impact on enterprise stocks. This conclusion provides a theoretical reference for China's listed enterprises to enhance enterprise value.*

Keywords: *Digital Transformation; Stakeholders; Enterprise Stock; Hypocrisy Theory.*

### Introduction

Stakeholders are not only a powerful tool to evaluate enterprise strategies, but also an important factor to influence enterprise decisions. Enterprises can't get legitimacy, improve their popularity and financial performance without the attention and evaluation of stakeholders. At the same time, scholars generally believe that the pressure and demands of stakeholders (such as owners and shareholders, employees, government, etc.) are the driving factors for enterprises to actively fulfill their social responsibilities, and the fulfillment of social responsibilities has an important economic impact on enterprises and is significantly related to their value (Wang & Xu, 2016). Therefore, in the process of enhancing enterprise value by fulfilling social responsibility (Jia *et al*., 2016), the focus of stakeholders' attention has become the focus of corporate disclosure. In recent years, driven by the development of digital technology, digital transformation has become a hot topic in the strategic choice of enterprises, and has become a strategic requirement for enterprises to cope with increasingly fierce market competition (Tian *et al*., 2022). At the same time, information disclosure, as a key element in protecting stakeholders and maintaining the healthy development of the capital market, is bound to have a certain impact on corporate stocks. By reviewing the relevant literature, it is not difficult to find that the digital transformation of enterprises can help enterprises improve information asymmetry and strengthen positive expectations of the market, and improve the performance of enterprise R&D investment and innovation output as well as corporate value and financial stability. This will ultimately significantly improve stock liquidity (Wu *et al*., 2021) and

significantly reduce the risk of stock price crash, showing structural heterogeneity (Wu *et al*., 2022). However, because digital transformation exposes businesses to new risks, such as data security and e-waste (Corbett, 2018), some scholars believe that digital transformation does not necessarily help enterprises achieve sustainable performance (Ahmadova *et al.*, 2021). Further, digital transformation means innovation, and innovation means that there is an uncontrollable risk of failure. Therefore, the impact of digital transformation on corporate stocks will not have a positive impact. Therefore, in China's complex economic environment, from the perspective of stakeholders, the research on the relationship between the impact of digital transformation and stocks still needs to be deepened. Based on this, this study uses hypocrisy theory and organizational façade theory to explore the impact of digital transformation disclosure (DTD) on corporate stocks from the perspective of stakeholders, in order to provide a valuable reference for corporate management practices and the promotion of corporate value.

### Literature Review and Theoretical Hypothesis

Based on the literature review of related fields such as enterprise management and social psychology, this paper sums up two different meanings of organizational hypocrisy from the perspective of perception, which can be divided into moral hypocrisy and behavioral hypocrisy. Moral hypocrisy, that is, an enterprise's attempt to be more noble than it really is, is often seen as ulterior motives or greed (Effron *et al*., 2018). Hypocrisy at the behavioral level refers to, the enterprise's external claims are inconsistent with its actions, reflecting the deviation of words and decisions from

actions. Action, speech and decision are three important forms of external behavior of an organization, and the disclosure of all speech, decision and action will affect the views of stakeholders to some extent. Under the basic assumption that there is a causal relationship among them, stakeholders usually think that the disclosure of company actions is credible, because the disclosure of speech and decision-making is related to the company's vision and intention, which is usually qualitative, while the disclosure of actions is related to results, which is usually quantitative (Michelon *et al.*, 2015). Therefore, this study focuses on organizational hypocrisy. Another study shows that organizational hypocrisy is often regarded as an inevitable phenomenon of organizational management (Brunsson, 1993). In order to meet the different demands of stakeholders, the company will use false statements, decisions and actions when necessary to manage the views of stakeholders, so as to maintain legitimacy (Cho *et al.*, 2015).

Organizational facade theory was originally intended to serve a goal: to create the legitimacy of the organization in the eyes of stakeholders, that is, a symbolic front established by the participants of the organization to convince the stakeholders of the organization of the legitimacy of the organization and its management. In this concept, an organization maintains only a relatively stable façade. Recent theoretical research has pointed out that the façade of an organization is not a single one, but has several aspects that serve different roles in managing stakeholders. Abrahamson and Baunder discuss several specific, powerful facades relevant to our analysis: the rational façade, which shows that an organization's decision-making is the result of rationality and is used to convince stakeholders that a solution in the current state can produce the best outcome; Reputation facades, where we can think of each façade as a substructure of an organization, whether formally marked (e.g., a sustainable development sector) or simply a collection of conversations, decisions, and actions taken to manage the needs of conflicting stakeholders; Progressive facades demonstrate the organization's progress towards achieving its stated goals. In the context of corporate social responsibility, progressive facades can play a symbolic and substantive role. Therefore, we can use this theory to study the use of actions, speeches, and decision disclosures by firms to build organizational facades that meet the different expectations of stakeholders.

From the perspective of stakeholders, enterprises undergoing digital transformation are in good condition, can create more profits and have great investment potential (Gregory, 2019). As the action reflects the activities that the company is carrying out or has carried out, the information is verifiable and more credible. Therefore, especially when stakeholders find information related to the action (Bharadwaj *et al.*, 2013). They may show a positive willingness to invest. In addition, as enterprises increasingly disclose corporate social responsibility (CSR) information through social media platforms, corporate social responsibility behaviors become more transparent, which helps these stakeholders to invest in corporate stocks and improve corporate value (Zhang & Ran, 2019). According to the organizational hypocrisy theory of Brunsson (2007). Due to the differences in the demands of stakeholder groups, different stakeholders have different views on the disclosure

of enterprises' digital transformation actions, which may lead to negative reactions besides positive ones. Based on this, this study puts forward the following assumptions:

H1a: The action disclosure of enterprise digital transformation is positively affecting enterprise stocks.

H1b: The action disclosure of enterprise digital transformation negatively affects enterprise stock.

Cho et al. (2012) found that even in the case of poor environmental performance, there is a positive correlation between environmental disclosure and environmental reputation score and the membership of Dow Jones Sustainability Index, which indicates that reputation seems to be more driven by corporate speech than its behavior. When the views of stakeholders indicate that there is a risk of legality, that is, a negative reaction, the company will provide statements and decision-making disclosures to alleviate the concerns of stakeholders and the possible negative impact of inconsistent behavior. Bansal & Clelland (2004) found that companies with low environmental legitimacy can reduce their unsystematic risks by expressing environmental commitments. But in theory, it is unclear whether and how stakeholders will react to these disclosures. Based on this, this study puts forward the following assumptions:

2a: The speech and decision-making disclosure of the digital transformation of enterprises positively affect the stock of enterprises.

2b: The speech and decision-making disclosure of enterprise digital transformation negatively affects enterprise stock.

Speech can directly or indirectly lead to corresponding actions, that is, managers directly use dialogue to show the company's values, ethics and goals, so that members of the organization can be consistent with the dialogue. In addition, managers can also make decisions based on previous conversations, thus increasing the possibility of taking corresponding actions. However, speech is often more agile than decision-making, and it can resonate with stakeholders. Therefore, this study puts forward the following assumptions:

H: Compared with the decision-making disclosure of digital transformation of enterprises, speech disclosure has a greater impact on enterprise stocks.

Different stakeholders have different investment habits and preferences, and they will realize that there may be differences between corporate statements, decisions and actions, especially the organization's public statements and decisions instead of action disclosure. Therefore, when really considering investment, stakeholders will pay more attention to the information related to corporate actions on CSR issues. Based on this, this study puts forward the following assumptions:

H: Compared with the speech and decision-making disclosure in the digital transformation of enterprises, the action disclosure has a greater impact on the stock of enterprises.

## Research Methods

### Data Collection

This study uses the authoritative securities professional consulting financial media and the "four major newspapers" that most investors must read: *China Securities Journal*, *Shanghai Securities News*, Securities Times and *Securities*

*Daily* as data sources. Crawl the data based on whether it contains keywords such as digitalization, digital technology, technological change, digital economy, digital value-added, digital workshop, digital transformation, etc. The reason why the data source is selected from four major newspapers is not only one of the most popular media used by companies to disclose CSR activities, but also the information of official website magazine is transmitted very quickly. Stakeholders can quickly capture the first-hand information disclosed by a large number of industries. Select the top 100 listed companies in China in 2021 (the list is from Fortune Chinese website https://www.caifuzhongwen.com/fortune500/) and exclude the companies, ST and *ST that have not released information on digital transformation. On the one hand, these companies are more agile and active in responding to digital transformation, on the other hand, compared with small companies, listed companies are more well-known, and they usually invest a lot of money in social media to convey their strategies and development plans to the outside world in time. This study takes Guo Tai'an as the data source, and the sampling period starts from January 1, 2018 to November 10, 2021. The influence of digital transformation information disclosure on enterprise stock is measured by the number of daily stock trading, and the data of daily stock trading is lagged. At the same time, the natural logarithm of the total assets of the enterprise at the end of the year represents the enterprise scale.

**Variable Setting and Description**

1. Interpreted variables. Drawing on the research of Hu and Zhu (2019), this study uses daily number of shares traded in China to measure corporate stocks. Reflect the impact of digital transformation disclosures on corporate stocks through changes in stock volume.

2. Explanatory variables. There are three types of digital transformation disclosures, namely action disclosure, speech disclosure and decision disclosure. All three disclosures are set to dumb variables, with "1" representing the disclosure of relevant information in the post and "0" indicating that the company did not publish the relevant information on the post.

3. Control variables. In order to avoid the bias of metrology that may arise from missing important variables, and considering that digital transformation is a high-resource-consuming and cost-intensive activity, enterprises need to have certain resources and capabilities to implement digital transformation. Therefore, the region of the enterprise and the size of the enterprise were selected as the control variables in this study, as shown in Table 1.

Table 1

**Variables and Measurement Methods**

| | Variable name | Definition |
|---|---|---|
| Independent variable | | |
| Action disclosure | Act | If the post discloses the action information, the dummy variable is 1, otherwise it is 0. |
| Speech disclosure | Talk | If the post discloses the speech information, the dummy variable is 1, otherwise it is 0. |
| Decision disclosure | Decision | If the post discloses the decision information, the dummy variable is 1, otherwise it is 0. |
| Dependent variable | | |
| The number of daily stocks traded | Number | The natural logarithm of the number of trading shares after the corresponding post date lags behind one week. |
| Control variable | | |
| Enterprise area | Region | The southeast, northwest and central regions are coded as 1, 2, 3, 4 and 5 respectively. |
| Scale | Scale | Natural logarithm of total assets at the end of the year. |

**Variable Coding**

First, we developed a program, and input the short name of the company and determined keywords to get the data. In the end, among the top 100 listed companies in China, we got samples of 34 companies, and finally collected 268 posts that met the research criteria. We manually divided the posts into three categories, namely, action disclosure, speech disclosure and decision disclosure. If there is a disclosure subject in the post, it is coded as "1", otherwise it is "0". The coding process is carried out by three selected graduate students majoring in business administration who are similar to their major in this research field. They are explained the concept and evaluation criteria of each variable to ensure that the coder understands the meaning of the variable. Finally, the coding results are analyzed and discussed. The controversial coding results are corrected, and the above steps are repeated until all the results meet the research requirements.

**Model Specification**

According to the analysis of the above related theories, firstly, a benchmark regression analysis is constructed to explore the impact of digital transformation on enterprise stocks. To test H1a, H1b, H2a, H2b and H3, the specific models are as follows:

$$Ln(y) = \beta 0 + \beta 1 （Act） + \beta 2(Talk) + \beta 3(Decision) + \beta 4(Number) + \beta 5(Region) + \beta 5(Scale) + \varepsilon$$

In order to test H4, we choose action disclosure as the benchmark level, compare the influence of speech and decision disclosure on stakeholders' reflection, and propose a model:

$$Ln(y) = \beta 0 + \beta 2(Talk) + \beta 3(Decision) + \beta 4(Number) + \beta 5(Region) + \beta 5(Scale) + \varepsilon$$

Among them, as a variable, the number of daily stocks traded in a single day, we use the natural logarithm of the number of trading shares corresponding to the date when the information disclosure lags one week. For the control variables, the areas where enterprises are located are mainly divided into the east, west, south, north and middle, which are coded by numbers 1-5. In this study, the natural logarithm of the total assets at the end of the year is used to measure the enterprise scale.

**Research Results**

**Descriptive Statistics and Correlation Analysis**

Among the 268 posts disclosed in digital transformation, 30.7 % used action disclosure, 44.9 % used speech disclosure, and 24.4 % used decision disclosure, which showed that enterprises used speech disclosure rather than decision disclosure to communicate with stakeholders on digital transformation of enterprises. The average values of independent variable action disclosure, speech disclosure and decision disclosure are 0.31, 0.45 and 0.24 respectively, and the standard deviations are 0.46, 0.50 and 0.43 respectively. The standard deviation of the controlled variable enterprise's region and enterprise scale is 1.27 and 2.09 respectively, with little difference.

Table 2

**Descriptive statistical analysis**

| Variable name | Quantity | Mean (mean) | Standard deviation (SD) | The Minimum value (min) | Max (max) |
|---|---|---|---|---|---|
| Action disclosure | 268 | 0.31 | 0.46 | 0.00 | 1.00 |
| Speech disclosure | 268 | 0.45 | 0.50 | 0.00 | 1.00 |
| Decision disclosure | 268 | 0.24 | 0.43 | 0.00 | 1.00 |
| The number of daily stocks traded | 268 | 18.36 | 0.90 | 16.21 | 20.36 |
| Enterprise area | 268 | 2.77 | 1.27 | 1.00 | 5.00 |
| Scale | 268 | 28.29 | 2.09 | 25.12 | 31.14 |

As shown in Table 3, there is a positive correlation between action disclosure and the number of daily stocks traded on a daily basis ($r = 0.629$, $p < 0.01$). Assuming H1a is established, H2a is not. Disclosure is negatively correlated with the number of daily stocks traded ($r = -0.262$, $p < 0.01$), and decision-making disclosure is negatively correlated with the number of daily stocks traded ($r = -0.372$, $p < 0.01$), assuming that H2b is established and H1b is not. Among the control variables, the company area ($r = 0.244$, $p < 0.01$) and the enterprise scale ($R = 0.223$, $P < 0.01$).01). There is a positive correlation with the number of stocks traded on a daily basis. The correlation coefficient between explanatory variables is less than 0.5, and the highest VIF is 1.357 in VIF test, which indicates that there is no multicollinearity.

Table 3

**Correlation Coefficient Matrix**

| Quantity | Variable | 1 | 2 | 3 | 4 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| 1 | Action disclosure | 1 | | | | | |
| 2 | Speech disclosure | -0.601** | 1 | | | | |
| 3 | Decision disclosure | -0.378** | -0.513** | 1 | | | |
| 4 | Number of shares traded per day | 0.629** | -0.262** | -0.372** | 1 | | |
| 5 | Company region | 0.053 | 0.100 | -0.172 | 0.244** | 1 | |
| 6 | Scale | -0.015 | 0.173 | -0.184* | 0.223* | 0.122 | 1 |

Note: N =268, *** means $p < 0.001$, ** means $p < 0.01$ and * means $p < 0.05$.

**Linear Regression Analysis**

In this study, independent variables, such as action disclosure, speech disclosure and decision disclosure, are set as dummy variables and recoded into different variables. Firstly, it is coded and analyzed based on action disclosure. As can be seen from Table 4, the number of daily stocks traded by speech disclosure is significantly lower than that by action disclosure ($p = 0.000 < 0.05$), and the number of daily stocks traded by speech disclosure is 1.105 lower than that by action disclosure. The number of daily stocks disclosed by decision is significantly lower than that disclosed by action ($p = 0.000 < 0.05$), and the number of daily stocks disclosed by decision is 1.431 lower than that disclosed by action. Compared with the speech and decision-making disclosure in the digital transformation of enterprises, the number of daily stocks traded by action disclosure is larger, that is, it has a greater impact on enterprise stocks. H4 is assumed to be verified.

Secondly, it is recoded on the basis of speech disclosure, and the results of regression analysis are shown in Table 4. The number of daily stocks traded in action disclosure is significantly higher than that in speech disclosure ($p = 0.00 < 0.05$), and the number of daily stocks traded in action disclosure is 1.105 higher than that in speech disclosure. The number of daily stocks disclosed by decision-making is significantly lower than that disclosed by speech ($p = 0.036 < 0.05$), and the number of daily stocks disclosed by decision-making is 0.327 lower than that disclosed by speech. Suppose H3 is preliminarily verified.

Finally, the decision disclosure is used as a benchmark to recode, and the results of regression analysis are shown in Table 4. The number of daily stocks traded in action disclosure is significantly higher than that in decision disclosure ($p = 0.00 < 0.05$), and the number of daily stocks traded in action disclosure is 1.431 higher than that in decision disclosure. The number of daily stock trading disclosed by speech is significantly higher than that disclosed by decision ($p = 0.036 < 0.05$), and the number of daily stock trading disclosed by speech is 0.327 higher than that disclosed by decision. Suppose H3 is verified again.

Table 4

**Linear Regression Analysis**

| Model | Independent variable | Non-standardized coefficient | Standard error | Beta | t | Significance |
|---|---|---|---|---|---|---|
| 1 | constant | 19.204 | 0.111 | | 173.541 | 0.000 |
| | Action disclosure | 0 | | | | |
| | Speech disclosure | -1.105 | 0.144 | -0.614 | -7.692 | 0.000 |
| | Decision disclosure | -1.431 | 0.166 | -0.687 | -8.607 | 0.000 |
| 2 | constant | 18.099 | 0.092 | | 197.733 | 0.000 |
| | Action disclosure | 1.105 | 0.144 | 0.570 | 7.692 | 0.000 |
| | Speech disclosure | 0 | | | | |
| | Decision disclosure | -0.327 | 0.154 | -0.157 | -2.117 | 0.036 |
| 3 | constant | 17.773 | 0.124 | | 143.191 | 0.000 |
| | Action disclosure | 1.431 | 0.166 | 0.738 | 8.607 | 0.000 |
| | Speech disclosure | 0.327 | 0.154 | 0.182 | 2.117 | 0.036 |
| | Decision disclosure | 0 | | | | |

**Heterogeneity Test**

In the above test, this study examines the impact of corporate digital transformation disclosure on corporate stocks based on a full sample perspective. In order to achieve the above purpose, all samples in this study are tested by sub-samples according to state-owned enterprise attributes and energy attributes (Table 5). The empirical results show that in the group of state-owned enterprises (models M(1) and M(2)), although the regression coefficients of enterprise digital transformation to enterprise stock are all positive, the T value (1.36) is too small to pass the significance test. In contrast, the empirical results of non-state-owned enterprises show that the impact of enterprise digital transformation on enterprise stock has passed the 1 % significance test. In the models M(3) and M(4), the energy attributes of enterprises are tested. The research found that, in the energy enterprise group, all indicators have passed the significance test; however, in non-energy enterprises, the regression coefficient has not passed the significance test. Compared with non-energy enterprises, the impact of digital transformation disclosure on the stock of energy enterprises is more obvious.

Table 5

**Heterogeneity Test of Enterprise Types**

| | M(1) Number | M(2) Number | M(3) Number | M(4) Number |
|---|---|---|---|---|
| DTD | 0.001 (1.36) | 0.002** (2.67) | 0.028** （2.23） | 0.001 (0.58) |
| Division basis | state-owned enterprise | Non-state owned enterprises | Energy enterprises | Non-energy enterprises |
| Region, Scale | YES | YES | YES | YES |
| Sample size | 238 | 30 | 63 | 205 |
| $R^2$ | 0.494 | 0.530 | 0.219 | 0.482 |

**Robustness Test**

The digital transformation process of companies and its impact on stocks has a lot to do with the impact of COVID-19 on a global scale. Under the strong impact of public emergencies, all sectors of society will stop production and the downward pressure of economy will be intensified. The real economy and capital market will certainly be affected to a certain extent, and the digital transformation process of enterprises may face stagnation. Ignoring this factor will easily bring a certain degree of endogenous interference to the research. Based on this, the factors of global epidemic crisis were removed in this study, that is, the enterprise samples in 2020 were deleted for regression test again. As shown in the empirical regression results (Table 6), the core conclusions have not changed.

Table 6

**Robustness Tests**

| Variables | M(1) Number | M(2) Number | M(3) Number |
|---|---|---|---|
| Act | 0.731*** | | |
| | (5.03) | | |
| Talk | | -0.633*** | |
| | | (-3.21) | |
| Decision | | | -0.683** |
| | | | (-2.34) |
| Region | -0.009 | 0.002 | -0.009 |
| | (-0.42) | (0.37) | (-0.37) |
| Scale | -0.004 | -0.005 | -0.002 |
| | (-0.63) | (0.23) | (-0.27) |
| Constant | -0.128 | 0.140 | 0.149 |
| | (-0.24) | (0.24) | (0.25) |

| Variables | M(1) Number | M(2) Number | M(3) Number |
|---|---|---|---|
| Observations | 167 | 166 | 167 |
| R-squared | 0.168 | 0.085 | 0.066 |
| F test | 1.60e-05 | 0.0136 | 0.0487 |
| r2_a | 0.142 | 0.0563 | 0.0373 |
| F | 6.488 | 2.970 | 2.285 |

## Research Enlightenment and Conclusion

### Conclusion

Using the theory of organized hypocrisy and the theory of organizational facade, this paper investigates how stakeholders' reaction to the legalization strategy adopted by the company in the four major financial newspapers and periodicals on digital transformation disclosure affects the stock of enterprises, and tests the heterogeneity of enterprise nature and industry type. By paying attention to the amount of changes in the number of daily stocks traded by the company after the disclosure of digital transformation information, it reflects the impact on corporate stocks. The research shows that action disclosure can positively affect enterprise stock, while speech disclosure and decision disclosure have negative effects on enterprise stock, but in comparison, speech disclosure shows more obvious effects than decision disclosure. Stakeholders are most active in the company's action strategy, which is embodied in the promotion of enterprise value and the increase of stock trading volume. In addition, through the heterogeneity test, it is found that non-state-owned enterprises and energy enterprises have stronger willingness and motivation to transform, so the digital transformation disclosure of such enterprises has a more significant impact on corporate stocks. The first set of assumptions in this study focuses on the response of stakeholders to corporate behavior disclosure. This study found that behavioral disclosure is likely to help companies maintain the legitimacy of stakeholders (reflected in the number of daily stocks traded), and the study shows that behavioral disclosure is more likely to attract stakeholders. The second set of assumptions, through the research, it is proved that stakeholders have negative reaction to the disclosure of speech and decision of enterprises. Finally, this study analyzes the heterogeneity of enterprise types and properties. The research shows that digital transformation disclosure has significant asymmetric effect on enterprise stocks when there are differences between enterprise properties and industry categories: the digital transformation of non-state-owned enterprises and energy-based enterprises can positively affect the stock of enterprises in the market. This is closely related to the policy inclination and the fulfillment of corporate social responsibility.

Based on the above analysis, the following policy recommendations are proposed. First of all, the government can introduce corresponding policies for enterprises in digital transformation, such as policy dividends, strategic consultation, etc., to maintain the stability of enterprises in the stock market and encourage enterprises to actively carry out digital transformation. Second, enterprises should appropriately strengthen the disclosure of digital transformation actions, and cannot stop strategy at speech and decision-making. At the same time, according to their own development status and characteristics to rationally plan the digital transformation strategy, can not rush to achieve, to use actions to test the results of enterprise transformation, and appropriately disclose relevant information to enhance investors' investment confidence. Finally, strengthen the supervision of the standardization and structure of the digital transformation information disclosure content of listed enterprises, standardize the forms and channels of relevant information disclosure of enterprises, and avoid information asymmetry between internal and external capital markets. At the same time, it reduces the cost and difficulty of stakeholders obtaining sound, high-quality information, helping them to accurately assess corporate risks, thereby reducing stock market volatility caused by irrational expectations.

### Research Deficiencies and Prospects

This study has some limitations. First of all, the data sources selected in the study are only newspapers. However, in reality, companies will try to set up various facades on different platforms, such as annual reports, CSR reports, company websites, Twitter, YouTube, Facebook and so on. Secondly, the selected newspapers and periodicals belong to government-run financial media, and they can usually obtain monopoly press release rights. Moreover, our research can't distinguish accounts operated by companies or outsourcing public relations companies, and third-party disclosure institutions may use monitoring software to maintain a high positive response from stakeholders. Future research may explore how social media officials of companies (or third-party PR companies) interact with their (or customers') stakeholders.

Note: The first author of this paper is responsible for research design, model construction and result analysis; The second author is responsible for data collection and analysis.

## References

Ahmadova, G., Delgado-Marquez, B., & Pedauga, L. E. (2021). The curvilinear relationship between digitalization and firm's environmental performance. *Academy of Management Proceedings*, 13605. https://doi.org/10.5465/AMBPP.2021.13605abstract

Bao, C. L. (2017). The replacement of jobs by artificial intelligence development is the general trend. *China Human Resources and Social Security*, (12), 50.

Bharadwaj, A., El Sawy, O., Pavlou, P., & Venkatraman, N. (2013). Digital business strategy: toward a next generation of insights. *MIS Quart*, 37(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3

Brunsson, N. (1993). Ideas and actions: Justification and hypocrisy as alternatives to control. *Accounting*, *Organizations and Society*, 18(6), 489–506. https://doi.org/10.1016/0361-3682(93)90001-M

Cho, C. H., Laine, M., Roberts, R. W., & Rodrigue, M. (2015). Organized hypocrisy,organizational façades and sustainability reporting. *Accounting, Organizations and Society*, 40, 78–94. https://doi.org/10.1016/j.aos.2014.12.003

Corbett, C. J. (2018). How sustainable is big data? *Production and Operations Management*, 1685–1695. https://doi.org/10.1111/poms.12837

Effron, D. A., O'Conor, K., Leroy, H., & Lucas, B. J. (2018). From inconsistency to hypocrisy: When does "saying one thing but doing another"invite condemnation?. *Research in Organizational Behavior*, (38), 61–75. https://doi.org/10.1016/j.riob.2018.10.003

Gregory, V. (2019). Understanding digital transformation: A review and a research agenda. Journal of *Strategic Information Systems*, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Hu, L. Y., & Zhu, J. M. (2019). Comparative analysis of stock price prediction based on stepwise regression and BP neural network. *Journal of Liaoning University of Technology* (Natural Science Edition), 201–205+210.

Jia, X. P, Liu, Y., & Liao, Y. H. (2016). Stakeholder pressure, corporate social responsibility and corporate value. *Journal of Management*, 13(02), 267–274.

Liu, S. C., Yan, J. C., Zhang, S. X., & Lin, H. C. (2021). Can the digital transformation of enterprise management improve input-output efficiency. *Management World*, (05), 170–190+13.

Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33, 59–78. https://doi.org/10.1016/j.cpa.2014.10.003

Tian, G. N., Li, B., & Cheng, Y. (2022). Does digital transformation matter for corporate risk-taking? *Finance Research Letters*, 1544–6123. https://doi.org/10.1016/j.frl.2022.103107

Wang, M. L., Song, Y. Y., Yan, H. F., et al. (2022). Research on the Impact of Digital Transformation on the Breadth of Enterprise Internationalization: The Mediating Role of Dynamic Capabilities. *Foreign Economics and Management*, 33–47.

Wang, Q. G., & Xu, X. Y. (2016). Value creation mechanism and empirical test of corporate social responsibility-based on stakeholder theory and life cycle theory. *China Soft Science*, (02), 179–192.

Wu, F., Hu, H. Z., Lin, H. Y., & Ren, X. Y. (2021). Digital Transformation of Enterprises and Capital Market Performance: Empirical Evidence from Stock Liquidity. *Management World*, (07), 130–144+10.

Wu, K. P., Fu, Y. M., & Kong, D. M. (2022). Does the digital transformation of enterprises affect stock price crash risk? *Finance Research Letters*, 48, 1544–6123. https://doi.org/10.1016/j.frl.2022.102888

Yeow, A., Soh, C., & Hansen, R. (2018). Aligning with new digital strategy: A dynamic capabilities approach. *The Journal of Strategic Information Systems*, 27(1), 43–58. https://doi.org/10.1016/j.jsis.2017.09.001

Yi, Z. H., Jiang, F. X., & Qin, Y. H. (2010). Product Market Competition, Corporate Governance and Information Disclosure Quality. *Management World*, (01), 133–141+161+188.

Zhang, Y. P., & Ran, J. S. (2019). How do start-ups achieve subversive innovation through dual capabilities - A case study based on Youmi Technology. *China Soft Science*, (1), 117–135.

**Authors' Biographies**

**Qiong Sun** has received the PhD degree from Capital Normal University. She was major in tourism management. She is an associate professor and working in Beijing Union University. She is interested in enterprise digital transformation, enterprise management, and tourism innovation management.

**Yaqi Shi** has received the post-graduate degree from Beijing Union University. She was major in business administration. She is a research assistant and working in Beijing Union University. She is interested in enterprise digital transformation, enterprise management, and tourism innovation management.