

# Factors Influencing The Digital Transformation Of Non-Financial Companies

Anton<sup>1\*</sup>, Yusia Bela<sup>2</sup>, Joseph Hendryawan Krisantanu Splendid<sup>3</sup>, Henny Setyo Lestari<sup>4</sup>, and Farah Margaretha Leon<sup>5</sup>

1,2,3,4,5 Economic and Business, Trisakti University, Jakarta

Email Address:

122012301090@std.trisakti.ac.id\*, 122012301088@std.trisakti.ac.id, 122012301110@std.trisakti.ac.id, henny\_setyo\_lestari@trisakti.ac.id, farahmargaretha@trisakti.ac.id \*Coressponding Author

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**Abstract**: Digital revolution driven by the rapid progress of internet technology has swept across the world. This changed the socio-economic landscape and ushered in a new era of industrial and technological transformation. This wave of digitalization has fueled dynamic economic activities and profoundly impacted global corporate innovation. This study investigates whether factors such as enterprise size, capital structure, percentage of accounts receivable, management overhead ratio, profitability, ownership, business age, and growth affect digital transformation. The samples used in this research is the financial statements of companies listed during the year of 2020 to 2023. The number of samples selected is 42 companies with 168 data. The results of this research indicated that percentage of accounts receivable, management overhead ratio, profitability, ownership, business age, and growth have an influence on digital transformation, while enterprise size and capital structure have no effect on digital transformation.

**Keywords:** Digital Transformation; Enterprise Size; Capital Structure; Percentage of Accounts Receivable; Management Overhead Ratio.

**Abstrak**: Revolusi digital yang didorong oleh kemajuan pesat dalam teknologi internet telah melanda seluruh dunia. Hal ini mengubah tatanan sosial-ekonomi dan membawa era baru transformasi industri dan teknologi. Gelombang digitalisasi ini telah memicu aktivitas ekonomi yang dinamis dan berdampak besar pada inovasi perusahaan global. Studi ini menyelidiki apakah faktor-faktor seperti ukuran perusahaan, struktur modal, persentase piutang, rasio biaya overhead manajemen, profitabilitas, kepemilikan, usia bisnis, dan pertumbuhan memengaruhi transformasi digital. Sampel yang digunakan dalam penelitian ini adalah laporan keuangan perusahaan dengan 168 data. Hasil penelitian ini menunjukkan bahwa persentase piutang, rasio biaya overhead manajemen, profitabilitas, kepemilikan, usia bisnis, dan yang terdaftar selama tahun 2020 hingga tahun 2023. Jumlah sampel yang dipilih sebanyak 42 perusahaan dengan 168 data. Hasil penelitian ini menunjukkan bahwa persentase piutang, rasio biaya overhead manajemen, profitabilitas, kepemilikan, usia bisnis, dan pertumbuhan terhadap transformasi digital, sedangkan ukuran perusahaan dan struktur modal tidak berpengaruh terhadap transformasi digital.

Kata Kunci: Transformasi Digital; Ukuran Perusahaan; Struktur Modal; Persentase Piutang; Rasio Biaya Overhead Manajemen.

## INTRODUCTION

Digital revolution driven by the rapid progress of internet technology has swept across the world. This changed the socio-economic landscape and ushered in a new era of industrial and technological transformation. Digital transformation improves collaboration between companies by enabling seamless communication and collaboration through digital platforms. The digital transformation landscape is diverse and uneven across sectors, with some industries showing higher levels of digital adoption than others (Zhao et al., 2024). The integration extends to various departments within the company, increasing overall





efficiency. This digital wave not only triggers dynamic economic activity but also greatly influences corporate innovation centers around the world.

The main reason companies want to undergo digital transformation is because they want to respond better to market demand and are committed to reducing production costs and increasing productivity. Globally renowned companies have utilized digital technology to carry out intelligent digital transformation in all aspects of company management, including production, operations and marketing, thus paving the way to facilitate rapid company development. Companies that implement digital transformation by using digital technology and disseminating data throughout the company will integrate scattered digital technology to empower operational technology, and gradually realize digital connectivity and data interconnection within the company, both in production and aspects. corporate operations, management, and business (Zhao et al., 2024).

The percentage of receivables on a company's balance sheet reflects its liquidity and cash flow management. Companies with a high percentage of receivables may face challenges in cash flow management that may impact their ability to invest in digital transformation (Q. A. Chen et al. (2024). Digital transformation can improve management efficiency by reducing overhead costs and increasing operational efficiency. This can include the use of automation and intelligent technology to reduce labor costs and increase the Company's competitiveness (Zhao et al., 2024).

Company's profitability indicates its financial health and ability to invest in strategic initiatives, including digital transformation. More profitable companies typically have more resources to facilitate digital change (Q. A. Chen et al. (2024). Companies with a higher or significant percentage of share ownership tend to be more careful and adopt a more gradual approach to digital transformation compared to those with insignificant share ownership in adopting digital technology to improve their performance (Zhao et al., 2024). The company's age and the level of digital transformation reflects the company's cautious approach based on the company's business age (Zhao et al., 2024).

The company's growth rate can be the main driver in carrying out digital transformation. Growing companies tend to invest more in digital technology to support their growth and improve operational efficiency. Digital transformation can help companies manage rapid growth and optimize business processes to support expansion (Zhao et al., 2024).

This research is a development of previous research developed by (Zhao et al., 2024). The novelty of this research is the addition of the growth as independent variable in accordance with research conducted by (Q. A. Chen et al., 2024) which resulted that growth influences digital transformation.

This research has interesting novelties to study, which are enterprise size, capital structure, percentage of accounts receivable, management overhead ratio, profitability, ownership, business age and growth may influence the digital transformation at non-financial companies listed on Indonesia Stock Exchange.

Previous research has found that enterprise size, capital structure, percentage of accounts receivable, management overhead ratio, ownership, business age and growth have significant influence to the digital transformation, while profitability is not proven to have an influence on digital transformation (Zhao et al., (2024).

Previous research conducted by (Q. A. Chen et al., 2024) has found that growth has significant influence to the digital transformation. With growth, companies are able to improve their digital infrastructure, which is an important foundation for successful digital





transformation. Overall growth provides a significant impetus for companies to adopt digital technology, improve operational processes, and innovate in products and services.

Enterprise size may have effect on the level of digital transformation. Large companies have more advantages in terms of capital, resources, expertise, and infrastructure that support the digital transformation process.

In contrast, medium to small companies often face greater challenges related to costs, awareness, and technological readiness, which can hinder their digital transformation process. This means that the larger the enterprise size, the higher the level of digital transformation that can be achieved, because large companies have more capacity to overcome challenges and take advantage of opportunities related to digital transformation (Zhao et al., 2024).

Capital structure may have effect on the level of digital transformation. The higher the company's debt, the greater the company's desire to carry out digital transformation. This means that companies with higher debt levels have a greater incentive to carry out digital transformation.

This is due to their need to reduce financing costs, improve operational efficiency, and attract support from external investors through increased transparency and reduced information asymmetry. Digital transformation provides the tools and infrastructure needed to achieve these goals, so companies with high debt are more motivated to carry out digital transformation (Zhao et al., 2024).

Companies with higher debt levels are more likely to undertake digital transformation. This is because digital transformation can help companies optimize their capital structure, increase financial flexibility, and facilitate debt financing. Digital transformation also accelerates the adjustment of companies' capital structures, allowing them to adapt more quickly to changes in market and economic conditions (Y. Chen et al., 2023)

The percentage of accounts receivable may have effect on the level of digital transformation. The higher the percentage of accounts receivable, the greater the company's desire to undergo digital transformation. This means that companies with a high percentage of accounts receivable have a greater incentive to undergo digital transformation.

This is due to the benefits of digital transformation in improving accounts receivable management, reducing the risk of bad debts, increasing capital turnover, and operational efficiency. Digital transformation provides the tools and infrastructure needed to optimize accounts receivable management, which in turn supports financial stability and improves overall company performance (Zhao et al., 2024).

Digital transformation has helped companies improve operational efficiency by reducing receivables turnover days and strengthening overall receivables management. This has an impact on improving cash flow, sales efficiency, and added value for the Company's entire supply chain (Yang & Cui, 2022).

Management overhead ratio may have effect on the level of digital transformation. The higher the management overhead ratio, the greater the company's desire to carry out digital transformation. This means that companies with a higher management overhead ratio have a greater incentive to undergo digital transformation.

This is due to the benefits of digital transformation in improving management efficiency and reducing administrative and overhead costs. Digital transformation provides the tools and infrastructure needed to optimize information management, increase management awareness, and improve operational efficiency.

Thus, companies facing high overhead costs are more motivated to carry out digital transformation in order to achieve greater efficiency and cost reduction (Zhao et al., 2024).





Companies with a high management overhead ratio tend to be more motivated to implement digital transformation in order to improve operational efficiency and reduce their costs. Digital transformation offers potential solutions through automation, data analytics, and other technologies that can reduce the need for manual labor and improve operational efficiency (Liu et al., 2023). Companies with a high management overhead ratio tend to be more motivated to implement digital transformation.

This is due to the various benefits of digital transformation that help improve efficiency, productivity, and adaptability of companies that enable companies to make faster and more accurate decisions to optimize production processes which can ultimately reduce waste and management overhead ratios and improve operational performance (Sandopart et al., 2023).

Companies with high profitability tend to be more able to invest in new technologies and digital transformation projects. More profitable companies have a greater ability to manage the risks associated with digital transformation, including the risks of implementing new technologies, so that digital transformation can be carried out more effectively, because they have the resources needed to invest in technology and innovation.

Successful digital transformation, supported by high profitability levels, will bring increased efficiency, productivity, and competitiveness, as well as increase shareholder value (Chairina & Yusri, 2023).

The type of company ownership plays an important role in determining their willingness and ability to undertake digital transformation. Private and foreign companies are more likely to have a higher willingness to engage in digital transformation compared to state-owned enterprises (Zhao et al., 2024).

Ownership can have a significant positive or negative effect on the level of a company's digital transformation. When the ownership level is low, ownership has a positive effect on digital transformation because executives' personal interests tend to be aligned with the company's long-term interests, so executives are more motivated to invest in digital transformation projects that increase the company's long-term value.

However, when the ownership level is high, ownership has a negative effect on digital transformation because when the ownership level increases, executives may focus more on short-term personal benefits, which can hinder investment in digital transformation where they avoid high risks and long return periods. This effect shows that executive ownership can affect a company's digital transformation in a dualistic way, depending on the proportion of ownership (N. Chen & Yang, 2022).

The relationship between company age and willingness to undertake digital transformation is generally mutual. Older and more experienced companies have more resources and capabilities to support digital transformation, while start-ups and young companies face great challenges due to limited resources and experience (Zhao et al., 2024). Business age effect to company's willingness and success in undertaking digital transformation.

Older companies tend to have more experience, knowledge, adequate resources, a strong organizational structure and better adaptability, which allows them to integrate digital technologies effectively. Overall, business age provides advantages in the readiness and success of digital transformation, because companies that have been established for a long time are considered to be more prepared in terms of experience, resources, organizational structure and adaptability needed to implement these technological changes (Wang et al., 2024).





The older the business age, the more difficult it is for the company to undertake digital transformation. This is because older companies tend to have rigid organizational structures and conservative work cultures, which can hinder the adoption of new technologies, and old technological infrastructure is often difficult to integrate with new digital technologies, which can slow down the digital transformation process. In addition, older companies often face challenges in terms of flexibility and speed in responding to market and technological changes compared to younger companies. The complex hierarchical structure in older companies can slow down the decision-making process and the implementation of technological changes. Younger companies tend to be more adaptive and flexible in dealing with technological changes. They are more open to innovation and adopt the latest digital technologies more quickly (Wu & Li, 2024).

The novelty of this article lies in its exploration of how growth directly impacts digital transformation in non-financial sectors. Its novelty lies in the exploration of the company's growth rate as a key driver for digital transformation among non-financial companies.

The factors generally associated with digital transformation include the adoption of new technology, market competition, and leadership. Thus, this article introduces company's growth rate as one of the variables that may influence scope and urgency concerning digital transformation efforts. It posits that companies experiencing rapid growth are more likely to invest in digital solutions so that the growing operational loads can be put under control, processes can be streamlined, and the competitive advantage maintained.

This fresh perspective highlights how growth dynamics can shape digital innovation strategies directly, with uniqueness in placing a two-way relationship between company's growth rate and the adoption of transformative technologies.

The company's growth rate can provide a strong foundation for digital transformation by increasing the company's capacity for innovation, adaptation to change, product development, and operational efficiency. Companies with high growth rates tend to be better able to develop new technologies that form the basis of digital transformation. Companies with high growth rates enable companies to create innovative solutions such as artificial intelligence, data analytics, and digital platforms that improve business processes and customer experiences.

Rapid growth will encourage companies to adopt digital technologies to improve operational efficiency and manage larger scales of operations. Fast-growing companies may face greater competitive pressures that encourage them to innovate and adopt digital solutions to stay competitive.

Companies with strong growth have better investment capabilities to implement digital technologies, compared to companies that grow slower. (Wang et al., 2024) stated that companies that experience faster growth tend to invest more resources in digital technologies. Larger and growing companies can achieve economies of scale that allow them to absorb high technology implementation costs.

Fast-growing companies also tend to be more innovative and adapt faster to technological changes, which supports the digital transformation process. Effective management in growing companies tends to be more supportive of investment in digital technologies to sustain and accelerate growth.

Companies that grow faster tend to be more ready and able to adopt digital technologies, which in turn increases their efficiency, innovation, and competitiveness. (Li & Xu, 2024) stated that growth creates a supportive environment for companies to adopt digital technologies, improve operational processes, and innovate.





Growth allows companies to have greater financial resources to invest in digital technologies. With growth, companies are able to improve their digital infrastructure, which is an important foundation for successful digital transformation. Overall, growth provides a significant impetus for companies to adopt digital technologies, improve operational processes, and innovate in products and services. This is supported by increased investment, encouragement for innovation, better availability of resources, market expansion, and government policy support.

## THEORITICAL REVIEW

The degree of digital transformation refers to the extent to which a company applies digital technologies in its operations to improve performance and efficiency. This includes the application of technologies such as artificial intelligence, blockchain, cloud computing, and big data to accelerate business processes and improve the company's competitiveness (Zhao et al., 2024). The dependent variable used to measure the degree of digital transformation is the company's digital transformation index. This index is calculated based on the frequency of occurrence of words related to digital transformation in the company's annual report.

Company size is often considered as one of the important factors in digital transformation. According to (Zhao et al., 2024), large companies have more capital and richer resources, as well as higher information technology expertise, so they have more advantages in carrying out digital transformation compared to small and medium-sized enterprises. Small and medium-sized companies tend to often face challenges in terms of limited capital and the capacity to absorb large digital transformation costs. According to (Q. A. Chen et al., 2024), company size is often associated with its capacity to carry out digital transformation. Large companies generally have more resources to invest in new technologies and digital infrastructure compared to small companies. Company size affects how quickly and effectively a company can adapt to technological and market changes.

A company's capital structure can affect its ability to undertake digital transformation. High debt levels can encourage companies to undertake digital transformation to optimize asset allocation, reduce debt ratios, and improve asset utilization efficiency. Companies with high debt ratios are often motivated to improve financial stability and reduce dependence on borrowed capital through digital transformation (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), a company's capital structure affects its ability to fund digital transformation projects. Companies with a strong capital structure, which shows an optimal combination of debt and equity, have a greater capacity to invest in technology and innovation.

The percentage of receivables in a company's balance sheet reflects its liquidity and cash flow management. Companies with a high percentage of receivables may face challenges in cash flow management that may affect their ability to invest in digital transformation (Q. A. Chen et al., 2024). According to (Zhaoet al., 2024), effective receivables management is an important component of a company's liquidity. Digital transformation can help companies manage their receivables more efficiently, improve the quality of receivables management, and reduce the risk of bad debts. With digitalization, companies can assess customer quality more accurately, which ultimately improves the efficiency of capital investment.

Digital transformation can improve management efficiency by reducing overhead costs and increasing operational efficiency. Digital technologies enable companies to share





information more effectively, reduce administrative costs, and improve the overall efficiency of a company's operations. This can include the use of automation and intelligent technologies to reduce labor costs and improve a company's competitiveness (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), the overhead ratio can measure the efficiency of using fixed costs in a company's operations. Effective overhead management can affect the availability of funds for investment in technology and digital transformation projects.

Firm profitability plays a critical role in determining the extent to which firms can invest in digital transformation. More profitable firms have more resources to invest in digital technologies, which in turn can improve the firm's operational efficiency and competitiveness. However, state-owned firms may view digital transformation as a way to leverage existing success, while private firms view it as a means to improve their performance (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), a firm's profitability indicates its financial health and ability to invest in strategic initiatives, including digital transformation. More profitable firms typically have more resources to facilitate digital change.

Company ownership can also affect the approach to digital transformation. Companies with higher or significant percentage of share ownership tend to be more cautious and adopt a more gradual approach to digital transformation compared to those with insignificant share ownership in adopting digital technologies to improve their performance (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), the percentage of share ownership can affect strategic decisions and the ability to adopt new technologies.

The age of a company's business can affect the company's ability and willingness to digitally transform. Older companies may have more established structures and processes, which may influence their decision to digitally transform. The relationship between company age and the level of digital transformation reflects the cautious approach of companies based on the age of the company's business (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), the age of a company can affect its ability to adapt to technological changes. Older companies may have more rigid structures, which may hinder the adoption of new technologies compared to newer companies.

The growth rate of a company can be a key driver in undertaking digital transformation. Growing companies tend to invest more in digital technologies to support their growth and improve operational efficiency. Digital transformation can help companies manage rapid growth and optimize business processes to support expansion (Zhao et al., 2024). According to (Q. A. Chen et al., 2024), a company's growth, whether in terms of revenue, size, or market expansion, can affect its ability to undertake digital transformation. Companies experiencing rapid growth are often more motivated to adopt new technologies to support their expansion.

The conceptual framework that shows the influence between independent variables on dependent variables can be described as follows:





Figure 1. Research Model

The research model describes the influence between the independent variables of enterprise size, capital structure, percentage of accounts receivable, management overhead ratio, profitability, ownership, business age and growth on the dependent variable of digital transformation.

The results of the study by (Zhao et al., 2024) stated that enterprise size has a positive effect on digital transformation. According to (Zhao et al., 2024), this is in line with economic theory, which states that large companies tend to have a higher level of readiness and undergo greater digital transformation. The larger the enterprise size, the greater the need to improve operational and management efficiency through digital transformation. The results of this study are also in line with studies conducted by (S. Li et al., 2024), (Zhao et al., 2024), (K. Wu et al., 2024), (Feng et al., 2024), (Y. Li & Zhao, 2024), (Lou & Zhou, 2024) and (H. Li & Xu, 2024). The results of studies conducted by (Vo et al., 2024) and (Ma et al., 2023) stated that enterprise size has a negative effect on digital transformation.

The results of the study by (Zhao et al., 2024) stated that capital structure has a positive effect on digital transformation, this is because companies with a higher capital structure strive to increase capital management efficiency and reduce capital costs through digital transformation. The results of this study are in line with the research conducted by (Ma et al., 2023) The results of studies conducted by (Y. Chen & Zhang, 2024), (S. Li et al., 2024), (Zhao et al., 2024), (Feng et al., 2024), (Y. Li & Zhao, 2024), (Lou & Zhou, 2024), and (H. Li & Xu, 2024) stated that capital structure has a negative effect on digital transformation.

The results of the study by (Zhao et al., 2024) stated that the percentage of accounts receivable has a positive effect on digital transformation. This shows that a higher percentage of accounts receivable encourages companies to deepen their digital transformation in order to increase capital turnover and reduce the percentage of their accounts receivable. The results of this study are in line with studies conducted by (Lou & Zhou, 2024) and (H. Li & Xu, 2024).

The results of the study by (Zhao et al., 2024) stated that the management overhead ratio has a positive effect on digital transformation, which implies that companies with higher overhead costs are more motivated to undergo digital transformation in order to reduce overhead costs. The results of this study are in line with the research conducted by





(K. Wu et al., 2024). The results of the study conducted by (Wang et al., 2024) stated that the management overhead ratio has a negative effect on digital transformation. This states that the higher the overhead costs, the lower the motivation of companies to undergo digital transformation.

The results of the study by (Y. Chen & Zhang, 2024) stated that profitability has a positive effect on digital transformation. According to (Y. Chen & Zhang, 2024), the higher the profit of a company, the higher the company's motivation to undergo digital transformation. The results of this study are also in line with studies conducted by (S. Li et al., 2024), (Vo et al., 2024) and (Y. Li & Zhao, 2024). The results of studies conducted by (Zhao et al., 2024), (K. Wu et al., 2024), (Ma et al., 2023), (Lou & Zhou, 2024) and (H. Li & Xu, 2024) stated that profitability has a negative effect on digital transformation.

The results of the study by (Zhao et al., 2024) stated that ownership has a negative effect on digital transformation. The results of this study are in line with studies conducted by (Y. Wu & Li, 2024) and (H. Li & Xu, 2024). This is because large ownership in corporate decision-making can encourage owners to carry out their supervision, thereby facilitating the implementation of decisions to reduce digital transformation for efficiency purposes (Zhao et al., 2024). The results of the study conducted by (Feng et al., 2024) stated that ownership has a positive effect on digital transformation.

The results of the study by (Zhao et al., 2024) stated that business age has a positive effect on digital transformation. The results of this study are also in line with studies conducted by S. (Li et al., 2024) and (K. Wu et al., 2024). This is because business age has an indirect impact on the company's willingness to engage in digital transformation. The results show that the more experienced a company is in operating, the more motivated it is to undergo digital transformation (Zhao et al., 2024). The results of studies conducted by (Y. Chen & Zhang, 2024), (Feng et al., 2024) and (Y. Li & Zhao, 2024) state that business age has a negative effect on digital transformation.

The results of the study by (Q. A. Chen et al., 2024) stated that growth has a positive effect on digital transformation. The results of this study are also in line with the research conducted by (Ma et al., 2023). This is because the higher the growth of a company during its operations, the more motivated it is to undergo digital transformation (Q. A. Chen et al., 2024). The results of studies conducted by (Feng et al., 2024) and (Y. Li & Zhao, 2024) stated that growth has a negative effect on digital transformation.

This study argues that digital transformation may increase value creation for the business world, awaken entrepreneurial spirit, and generate digital profits. Digital transformation is a complex, long-term and expensive endeavor. This covers various aspects, from software and hardware procurement to ongoing system maintenance, from equipment upgrades to personnel training. Thus, the proposed hypothesis is as follows:

- H1: Enterprise size has an influence on digital transformation
- H2: Capital structure has an influence on digital transformation
- H3: Percentage of accounts receivable has an influence on digital transformation
- H4: Management overhead ratio has an influence on digital transformation
- H5: Profitability has an influence on digital transformation
- H6: Ownership has an influence on digital transformation
- H7: Business age has an influence on digital transformation
- H8: Growth has an influence on digital transformation





#### METHODS

The objects used in this research are companies listed on the Indonesia Stock Exchange (BEI) (https://www.idx.co.id/). The data collection technique in this research uses secondary data obtained. The type of data used in the research is quantitative in the form of calculated values contained in the company's financial reports and annual reports. This research data consists of data from companies in the non-financial sector listed on the Indonesia Stock Exchange. In this research, the sampling method used was purposive sampling method. The choice of this method is made on the basis of considerations that focus on certain objectives. The sample in this research includes 168 financial reports, consisting of 42 non-financial companies for 4 years (2020 to 2023 period).

This study is characterised as theoretical and empirical with an explanatory and exploratory character, which seeks to predict and explain the digital transformation by identifying the characteristics that influence it. To this end, the hypotheses chosen were formulated:

 $DTD = \beta_0 + \beta_1 SIZE + \beta_2 LEV + \beta_3 REC + \beta_4 MFEE + \beta_5 ROA + \beta_6 SOE + \beta_7 AGE + \beta_8 GROWTH + \varepsilon$ (1)

This study has the following variable measurements such as digital transformation degree is measured by the percentage of digital intangible assets to total intangible assets (Wang et al., 2024). Enterprise size is measured by log of the total assets of the listed company at the end of the year (Wang et al., 2024). Capital structure is measured by percentage of total debt to total assets (Ahmed et al., 2024). Percentage of accounts receivable is measured by percentage of total receivables to total assets (Q. A. Chen et al., 2024). Management overhead ratio is measured by percentage of management cost to total revenue (Q. A. Chen et al., 2024). Profitability is measured return on assets (ROA) by net income to total assets (Naser et al., 2024). Ownership is measured by the highest of total number of shares held by shareholders to the total number of outstanding shares (Zhao et al., 2024). Business age is measured by number of listing year of the company went public (Wang et al., 2024). Growth is measured by percentage change in net income from current year compared to previous year. (Q. A. Chen et al., 2024).

#### RESULT

**Goodness of Fit Test (R<sup>2</sup>).** This test aims to find out how much influence the independent variable contributes to the dependent variable provided that the F test results in the regression analysis are significant. The R<sup>2</sup> value is between 0 and 1 (0 less than R<sup>2</sup>more than 1), where if the value approaches 1 then the independent and dependent variables have a closer relationship. If there are more than two variables, then the adjusted R<sup>2</sup> value is used.





| Coefficient of Determination |                      |                  |                    |  |  |
|------------------------------|----------------------|------------------|--------------------|--|--|
| Dependent<br>Variable        | Model                | <b>R-Squared</b> | Adjusted R-Squared |  |  |
| DTD                          | Prob(F<br>Statistic) | 0.592            | 0.570              |  |  |

Table 1. Goodness of Fit Test Results

Source: Data processing using E-views

**Table 1** shows the Goodness of Fit test results, DTD produces an adjusted  $R^2$  value of 0.570. This can be interpreted that the independent variable is able to explain the variation of DTD as a dependent variable by 57.050 per cent and the remaining 42.950 per cent, this explains that DTD can be influenced by other factors that are not included in this model. So there is a very strong relationship between the independent variables and DTD.

This test is used to test whether simultaneously there is a significant influence of the independent variable on the dependent variable. If the sig of F less than 0.050 means that the independent variable simultaneously has an influence on the dependent variable, so the regression model is suitable to be used. If the sig of F more than 0.050 means that simultaneously the independent variable has no influence on the dependent variable, so the regression model is not suitable for use.

| Table 2. F | <b>Test Results</b> |
|------------|---------------------|
|------------|---------------------|

| Simultant Test (F-Test) |       |                 |                       |  |
|-------------------------|-------|-----------------|-----------------------|--|
| <b>Effects Test</b>     | Prob. | Hypothesis      | Conclusion            |  |
| DTD                     | 0.000 | Ho was rejected | Significant influence |  |

Source: Data processing using E-views

**Table 2** shows F test results of the data in this model which uses robust least squares, it can be seen that the F-statistic profitability shows a value of 0.000 less than 0.050, therefore the results of the analysis in this study show that simultaneously the independent variables have an influence on DTD as a dependent, so that the regression model is suitable for use in this research.

#### Table 3. Descriptive Statistics

| Variable | Mean   | Median | Maximum | Minimum | Std. Dev. |
|----------|--------|--------|---------|---------|-----------|
| DTD      | 0.730  | 1.000  | 1.000   | 0.002   | 0.383     |
| SIZE     | 12.835 | 12.782 | 14.649  | 11.709  | 0.655     |
| LEV      | 0.491  | 0.366  | 7.333   | 0.079   | 0.705     |
| REC      | 0.218  | 0.106  | 5.946   | 0.025   | 0.608     |
| MFEE     | 0.714  | 0.767  | 0.982   | 0.383   | 0.166     |
| ROA      | 0.153  | 0.070  | 4.788   | 0.000   | 0.489     |
| SOE      | 0.577  | 0.554  | 1.494   | 0.102   | 0.241     |
| AGE      | 18.400 | 14.500 | 42.000  | 2.000   | 11.841    |
| GROWTH   | 2.649  | 2.673  | 3.737   | 0.693   | 0.792     |

Source: Data processing using E-views

**Table 3** shows descriptive statistics test results. Descriptive statistics test describes a summary of research data such as mean, standard deviation, minimum value, maximum





value, sum, and variance. The results of descriptive statistics for the 2020 to 2023 period show that the digital transformation degree (DTD) has a minimum value of 0.002, a maximum value of 1.000, a mean value of 0.730, and a standard deviation of 0.383.

The mean of 0.730 infers that the majority of companies are fairly advanced along their journey of digital transformation. A median of 1.000 infers that half the companies have already achieved full levels of digitalization. However, the minimum value of 0.002 indicates that a few companies have hardly begun their process of digital transformation, and with a standard deviation of 0.383, the level of digitalization varies substantially across companies. This means that the pace and level of digital transformation might depend on a number of factors in both internal and external groups, and it may be expected that other variables in the table might have different relationships with the intensity of digitalization. The present study can go further in showing what accelerates or hinders the process of transformation.

The results of descriptive statistics for the 2020 to 2023 period show that SIZE has a minimum value of 11.709, a maximum value of 14.649, a mean value of 12.835, and a standard deviation of 0.655. Even though the size of the company is big with an average of 12.835 and a low variation Std. Dev of 0.655, data analysis indicates that the success of digital transformation does not rely on the company's size. This could be because the decision for digital transformation is not determined by the size of an enterprise; other variables such as organizational structure or corporate strategy might be very significant. While big companies have several resources at their disposal, not all invest aggressively in digitalization as compared to smaller and more agile companies. This implies that the size of a company does not necessarily determine its readiness to adopt digital technology.

The results of descriptive statistics for the 2020 to 2023 period show that capital structure (LEV) has a minimum value of 0.079, a maximum value of 7.333, a mean value of 0.491, and a standard deviation of 0.705.

The mean of LEV is 0.491 with a fairly large standard deviation of 0.705 and an extremely high maximum of 7.333, indicating some companies have extremely high levels of debt. Although some companies may possess high levels of debt, leverage does not impact the capability nor the willingness to undergo digital transformation. This is possibly because highly leveraged companies may still look for other sources of finance to finance their digital initiatives, or because digitalization is perceived as a strategic must that needs to be pursued regardless of the financial situation in the short run. Moreover, companies with low leverage may not necessarily invest the excess capital in digital initiatives. Hence, high or low levels of debt do not influence a company's ability to digitally transform.

The results of descriptive statistics for the 2020 to 2023 period show that the percentage of accounts receivable (REC) has a minimum value of 0.025, a maximum value of 5.946, a mean value of 0.218, and a standard deviation of 0.608.

The mean of 0.218 and median of 0.106 indicate that most companies have a relatively low proportion of receivables to total assets. However, a very high maximum value of 5.946 and standard deviation of 0.608 reflect that some companies have very high receivables, which might squeeze their liquidity. This aligns with the research findings, where receivables have a negative impact that effectively impacts the digital transformation of a company; hence, companies with higher receivables are not likely to invest in technology due to liquidity issues.

The results of descriptive statistics for the 2020 to 2023 period show that the management overhead ratio (MFEE) has a minimum value of 0.383, a maximum value of 0.982, a mean value of 0.714, and a standard deviation of 0.166. MFEE has a mean of 0.714





and a low standard deviation of 0.166, indicating relatively consistent management fees across most companies. Even though with this stability of management fees across companies, this could be an effect from misaligned incentives for management from the goals of digital transformation. Management not properly incentivized to drive innovation and digital change may lack the impetus to actively push for transformation initiatives. It indicates that higher incentives, in fact, do not always motivate the management to place technology investment as a high agenda priority.

The results of descriptive statistics for the 2020 to 2023 period show that profitability (ROA) has a minimum value of 0.000, a maximum value of 4.788, a mean value of 0.153, and a standard deviation of 0.489. ROA varies highly with an average of 0.153 and a standard deviation of 0.489, indicating that most companies have low returns on assets. The high maximum value of 4.788 reflects those companies with very high profits. In this study, however, it was found that ROA significantly negatively influences digital transformation-maybe because less profitable companies might be more eager to push digital transformation, enhancing their efficiency and competitiveness. Quite on the contrary, highly profitable companies may be slow to change since they are more comfortable with the current state of the market business and, in this case, slower to undertake digital innovations.

The results of descriptive statistics for the 2020 to 2023 period show that ownership (SOE) has a minimum value of 0.102, a maximum value of 1.494, a mean value of 0.577, and a standard deviation of 0.241514.

The mean for ownership type is 0.577, meaning most companies in the sample are publicly owned. This is in support of the notion that companies that are publicly owned normally get support for digital transformation. Most are funded or get policy support for digitization and are, therefore, more well-placed to do large-scale transformation efforts. This is in line with the positive significant impact that companies under public ownership exert on digital transformation and, consequently, reflects support for digitalization initiatives such companies would employ.

The results of descriptive statistics for the 2020 to 2023 period show that business age (AGE) has a minimum value of 2.000, a maximum value of 42.00, a mean value of 18.400, and a standard deviation of 11.841.

The age of companies ranges from 2 to 42 years, with a mean of 18.400 years, suggesting that companies in the sample are relatively mature. Older firms generally have more resources and experience in managing technological changes, although they may face challenges in adapting to new technologies. However, the outcome here indicates that the older companies in this sample usually tend to be more successful concerning their digital transformation processes. It aligns with the result that AGE has a significant positive effect on digital transformation, as older companies are more likely to engage in digitalization.

The results of descriptive statistics for the 2020 to 2023 period show that growth (GROWTH) has a minimum value of 0.693, a maximum value of 3.737, a mean value of 2.649, and a standard deviation of 0.792. The average growth rate of 2.649 shows a view that the sample companies are mostly in an expansion phase of growth. On the other hand, the research shows that GROWTH significantly negatively influences digital transformation. High growth may distract a company's focus from digitalization towards rapid business growth, which could explain such a negative result. Fast-growing companies may feel they are already competitive without needing to aggressively adopt digital technologies.





Based on the results of the research conducted, the researcher tried to provide the main points of the overall research findings. The results of the panel data regression analysis can be concluded with the regression model equation, namely:

DTD = 1.014 + 0.000\*SIZE - 0.000\*LEV - 0.066\*REC - 0.013\*MFEE - 0.101\*ROA + 0.027\*SOE + 0.000\*AGE - 0.011\*GROWTH.(2)

From the equation above, the constant value is 1.014. This means if the variables SIZE, capital structure (LEV), percentage of accounts receivable (REC), management overhead ratio (MFEE), profitability (ROA), ownership (SOE), business age (AGE), and GROWTH are equal to zero or ignored, then the digital transformation degree (DTD) value is 1.014. The robust least squares test is a test where the assumptions underlying the procedure are not met. Because it uses robust least squares, classical assumptions are allowed to be ignored. To test whether the null hypothesis is rejected or accepted, the starting point is if the prob value is less than or more than 0.050, meaning that if the significance value of the independent variable is below 0.050, then the hypothesis is accepted and vice versa. Based on the results of data processing, it is known that the variables percentage of accounts receivable (REC), management overhead ratio (MFEE), profitability (ROA) and GROWTH have a negative and significant effect on digital transformation degree (DTD). Ownership (SOE) and business age (AGE) have a positive and significant effect on digital transformation degree (DTD). To determine the correlation of the independent variables with the dependent variable, the coefficient of determination  $(R^2)$  test is carried out. Based on the results of data processing, the  $R^2$  figure is 0.592. So, it can be concluded that 59.210 per cent of the dependent variable can be explained by variations in the eight independent variables, while the remaining 40.790 per cent can be explained by other variables outside the research.

The results of statistical testing with robust least squares show that the variables percentage of accounts receivable (REC), management overhead ratio (MFEE), profitability (ROA) and GROWTH have a negative and significant effect on digital transformation degree (DTD). Ownership (SOE) and business age (AGE) have a positive and significant effect on digital transformation degree (DTD).

| Variable    | Model DTD  |           | D e gral4 | Canalustan                  |
|-------------|------------|-----------|-----------|-----------------------------|
| variable    | Coeff      | Prob      | Kesuit    | Conclusion                  |
| SIZE        | 0.000      | 0.583     | No effect | Not significant             |
| LEV         | -0.000     | 0.941     | No effect | Not significant             |
| DEC         | 0.044      | 0.000     | Negative  | Significant negative effect |
| REC         | -0.000     | 0.000     | Influence | on DTD                      |
| MFEE        | -0.013     | 0.008     | Negative  | Significant negative effect |
|             |            | 0.008     | Influence | on DTD                      |
| ROA -0.10   | 0 101      | 0.000     | Negative  | Significant negative effect |
|             | -0.101     | 0.000     | Influence | on DTD                      |
| SOE 0.027 0 | 0.027      | 0.000     | Positive  | Significant positive effect |
|             | 0.000      | Influence | on DTD    |                             |
| AGE         | 0.000      | 0.000     | Positive  | Significant positive effect |
|             |            | 0.000     | Influence | on DTD                      |
| CROWTH      | -0.011 0.0 | 0.001     | Negative  | Significant negative effect |
|             |            | 0.001     | Influence | on DTD                      |

Table 4. Individual Test Results (T-test)

Source: Data processing using E-views





**Table 4 shows** individual test results (T-test). This test is carried out to find out whether each independent variable has a significant influence on the dependent variable. The selection criteria are if the sig of t less than 0.050 then Ho is rejected, meaning that the independent variable has an influence on the dependent variable. If the sig of t more than 0.050 then Ho is accepted, meaning the independent variable has no influence on the dependent variable.

H1: There is an influence of enterprise size on digital transformation.

Enterprise size (SIZE) towards digital transformation (DTD) has a probability value of 0.583 more than 0.050. This shows that there is no influence of enterprise size (SIZE) on digital transformation (DTD).

H2: There is an influence of capital structure on digital transformation.

Capital structure (LEV) for digital transformation (DTD) has a probability value of 0.941 more than 0.050. This shows that there is no influence of capital structure (LEV) on digital transformation (DTD).

H3: There is an influence of percentage of accounts receivable on digital transformation.

The percentage of accounts receivable (REC) against digital transformation (DTD) shows a probability value of 0.000 less than 0.050. The percentage of accounts receivable (REC) coefficient on digital transformation (DTD) is -0.066, which means that the percentage of accounts receivable (REC) has a significant negative influence on digital transformation (DTD).

H4: There is an influence of management overhead ratio on digital transformation.

The impact of management overhead ratio (MFEE) on digital transformation (DTD) can be measured by probability values that show significant results. The probability value of management overhead ratio (MFEE) on digital transformation (DTD) is 0.008 less than 0.050, thus indicating a significant influence. The management overhead ratio (MFEE) coefficient on digital transformation (DTD) is -0.013, indicating that the management overhead ratio (MFEE) has a negative effect on digital transformation (DTD).

**H5:** There is an influence of profitability on digital transformation.

The probability of profitability (ROA) on digital transformation (DTD) with a value of 0.000 less than 0.050 indicates that there is a significant influence of profitability (ROA) on digital transformation (DTD). The profitability coefficient (ROA) on digital transformation (DTD) is -0.101, indicating that profitability (ROA) has a negative effect on digital transformation (DTD).

**H6:** There is an influence of ownership on digital transformation.

Ownership (SOE) towards digital transformation (DTD) has a probability value of 0.000 less than 0.050 indicating an influential relationship. The ownership coefficient (SOE)





for digital transformation (DTD) is 0.027. This shows that ownership (SOE) has a significant positive effect on digital transformation (DTD).

**H7:** There is an influence of business age on digital transformation.

Business age (AGE) on digital transformation (DTD) has a probability value of 0.000 less than 0.050, indicating a significant relationship. The coefficient of business age (AGE) on digital transformation (DTD) is 0.000, meaning that there is a significant positive influence of business age (AGE) on digital transformation (DTD).

**H8:** There is an influence of growth on digital transformation.

The influence of growth on digital transformation (DTD) has a probability value of 0.001 less than 0.050 which shows a significant correlation. The growth value coefficient for digital transformation (DTD) is -0.011. This means that there is a significant negative influence of growth on digital transformation (DTD).

## DISCUSSION

Based on the results of data testing in this research, only the SIZE and capital structure (LEV) variables do not have a significant influence on the digital transformation degree (DTD). The variables percentage of accounts receivable (REC), management overhead ratio (MFEE), profitability (ROA), ownership (SOE), business age (AGE), and GROWTH have an influence on digital transformation degree (DTD).

Based on the results of the tests carried out, the following conclusions were obtained: (1) The enterprise size (SIZE) variable has no effect on digital transformation (DTD). The results of this study are in line with research by (Y. Wu & Li, 2024) stated that company size has no effect on digital transformation. While, these results contradict with research conducted by (Zhao et al., 2024), (S. Li et al., 2024), (Zhao et al., 2024), (K. Wu et al., 2024), (Feng et al., 2024), (Y. Li & Zhao, 2024), (Lou & Zhou, 2024) and (H. Li & Xu, 2024) show that percentage of enterprise size has a positive and significant effect on digital transformation and research conducted by (Vo et al., 2024) and (Ma et al., 2023) stated that company size has negative effect on digital transformation. (2) The capital structure variable (LEV) has no effect on digital transformation (DTD). The results of this study are in line with research by (K. Wu et al., 2024) state that capital structure has no effect on digital transformation.

While these results contradict with research conducted by (Zhao et al., 2024) and (Ma et al., 2023) stated that capital structure has positive effect on digital transformation and research conducted by (Y. Chen & Zhang, 2024), (S. Li et al., 2024), (Zhao et al., 2024), (Feng et al., 2024), (Y. Li & Zhao, 2024), (Lou & Zhou, 2024), and (H. Li & Xu, 2024) show that capital structure has negative effect on digital transformation. (3) The percentage of accounts receivable (REC) variable has a significant negative effect on digital transformation (DTD). These results contradict with research conducted by (Zhao et al., 2024), (Lou & Zhou, 2024) and (H. Li & Xu, 2024) show that percentage of accounts receivable has a positive and significant effect on digital transformation.

According to researchers, the percentage of accounts receivable can have a negative effect on the company's digital transformation because with a high percentage of accounts receivable, this will reduce liquidity and limit the company's funds to carry out digital





transformation. A high percentage of accounts receivable increases financial risk and instability and makes companies reluctant to take big risks in digital transformation projects. A high percentage of accounts receivable makes the company focus on accounts receivable where the company's resources are diverted to managing accounts receivable rather than developing a digital strategy in the form of digital transformation. In addition, high percentage of accounts receivable will hinder companies from making initial investments in digital technology.

Differences in research results regarding the effect of the percentage of accounts receivable on digital transformation will make the percentage of accounts receivable variable one of the important variables that is very interesting for further research. (4) The management overhead ratio (MFEE) variable has a significant negative effect on digital transformation (DTD). The results of this study are in line with research by (Wang et al., 2024) state that the management overhead ratio has a negative effect on digital transformation due to the higher the overhead costs, the lower the motivation of companies to undergo digital transformation, but contradict with research conducted by (Zhao et al., 2024) and (K. Wu et al., 2024) state that the management overhead ratio has a positive effect on digital transformation. (5) The profitability variable (ROA) has a significant negative effect on digital transformation (DTD).

The results of this study are in line with research conducted by (Zhao et al., 2024), (K. Wu et al., 2024), (Ma et al., 2023), (Lou & Zhou, 2024) and (H. Li & Xu, 2024) which stated that profitability has a negative effect on digital transformation. This is because the higher the profit of a company, the lower the company's motivation to undergo digital transformation. While these results contradict with research conducted by (Y. Chen & Zhang, 2024), (S. Li et al., 2024), (Vo et al., 2024) and (Y. Li & Zhao, 2024) state that the profitability has a positive effect on digital transformation. (6) Variable ownership (SOE) has a significant positive effect on digital transformation (DTD).

The results of this study are in line with research conducted by (Feng et al., 2024) which states that ownership has a positive influence on digital transformation. This is because large ownership in corporate decision-making can encourage owners to carry out their supervision, thereby facilitating the implementation of decisions to carry out digital transformation. The results of this study contradict with research conducted by (Zhao et al., 2024), (Y. Wu & Li, 2024) and (H. Li & Xu, 2024), state that the ownership has a negative effect on digital transformation. (7) The business age (AGE) variable has a significant positive effect on digital transformation (DTD).

The results of this study are in line with research by (Zhao et al., 2024), (S. Li et al., 2024) and (K. Wu et al., 2024) which states business age has an indirect impact on the company's willingness to engage in digital transformation. The results show that the more experienced the company is in operating, the more motivated it is to undergo digital transformation (Zhao et al., 2024). While these results contradict with research conducted by (Y. Chen & Zhang, 2024), (Feng et al., 2024) and (Y. Li & Zhao, 2024) state that the business age has a negative effect on digital transformation. (8) The growth (GROWTH) variable has a significant negative effect on digital transformation (DTD).

The results of this study are in line with research conducted by (Feng et al., 2024) and (Y. Li & Zhao, 2024) which stated business growth have negative effect on digital transformation. This result show that higher growth of a company during operations, the lower motivation to undergo digital transformation due to cash flow maintained for business growth. While, these results contradict with research conducted by (Q. A. Chen et al., 2024) and Ma et al. (2023) state that growth has a positive effect on digital transformation.





Based on the findings of the research conducted, there are benefits that can be obtained as implications for financial managers and investors as considerations when making decisions. Some of the implications achieved include the following:

For Financial Managers. This research is expected to provide input for financial managers to evaluate the implementation of company digital technology and increase understanding of what factors can influence the success of the company's digital transformation which can be used as considerations in decision making regarding the strategies that must be implemented in allocating resources effectively to maximize company profits.

**For Investors.** This research is expected to provide information for investors in evaluating investment potential in companies that are undergoing digital transformation and increasing knowledge about the factors that influence the success of the company's digital transformation by assessing risks and potential profits so that investors can compile a valuable investment portfolio, especially in choosing companies that have a strong digital strategy and have the potential to provide a high return on investment (ROI).

This research aims to help companies and stakeholders identify the internal and external factors driving digital transformation. It will offer practical advice for managers on how to design and implement digital transformation strategies, highlighting the importance of key technologies like cloud computing, big data analytics, AI, and IoT—integral components of digital transformation. The study also intends to guide policymakers in fostering innovation and investing in technology, and it underscores the need for organizational structure and cultural changes that align with technological advancements to boost competitiveness. Moreover, it will explore the significant impacts of digital transformation on productivity, efficiency, and sustainability, and stress the importance of curricula that encompass digital skills and change management to facilitate adaptation to rapid technological developments.

The research will contribute significantly to various stakeholders by enriching the literature on key aspects of technology adoption, enhancing knowledge in strategic management concerning organizational change, and broadening the information technology literature with practical examples of technology applications and impacts. It will also deepen understanding in public policy and technology regulation, offer empirical insights into organizational changes that support digital transformation, enrich the business economics literature by exploring the relationship between technology adoption and economic and environmental outcomes, and increase knowledge in education and training related to modern technology and management needs.

## CONCLUSION

The limitations of this study include: (1) In this study, the observation period used was only four years, namely from 2020-2023. (2) In this study, only the variables enterprise size (SIZE), capital structure (LEV), percentage of accounts receivable (REC), management overhead ratio (MFEE), profitability (ROA), ownership (SOE), business age (AGE), and growth (GROWTH) were used. Based on the results and limitations above, the suggestions that can be given for further research include: (1) Future research is advised to increase the research period, so that data distribution is better. (2) Future research should add other independent variables, such as R & D investment intensity, tobins'q, cash flow ratio, and other macro factors such as interest rates, rupiah exchange rates.





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