

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Grand Theory**

This study is grounded in the Resource-Based View (RBV) and Stakeholder Theory to explain how firms create value through digital transformation and sustainability practices.

##### **2.1.1 Resource-Based View**

The Resource-Based View (RBV) is a theoretical perspective that explains how firms achieve and sustain competitive advantage through the effective utilization of their internal resources and capabilities. According to RBV, a firm's performance is not only determined by external market conditions but also by the unique resources it possesses and how well those resources are managed (Barney, 1991). Resources that are valuable, rare, inimitable, and non-substitutable are considered to provide a strong foundation for achieving long-term competitive advantage (Barney, 1991; Wernerfelt, 1984). In addition to possessing such resources, firms must also develop the capabilities to deploy them effectively in order to generate superior performance outcomes (Teece, 2018).

In the context of modern business environments, digital technologies have become one of the most important strategic resources for firms. The rapid advancement of digital innovation, including big data, artificial intelligence, and digital platforms, has significantly transformed how companies operate and compete. From an RBV perspective, digital transformation can be understood as a process through which firms integrate digital technologies into their core operations to enhance their capabilities and improve overall performance. This transformation is not limited to adopting new technologies, but also involves developing the organizational capabilities required to utilize these technologies effectively.

The implementation of digital transformation enables firms to improve operational efficiency, optimize decision-making processes, and enhance responsiveness to market changes. For instance, digital systems allow companies to manage large volumes of data more effectively, which supports

better strategic planning and faster decision-making. In addition, digital tools can streamline business processes, reduce operational costs, and improve productivity. These improvements reflect how digital transformation strengthens a firm's internal capabilities, which is consistent with the RBV argument that superior performance is driven by the effective use of strategic resources.

Furthermore, digital transformation also contributes to value creation by enabling firms to innovate and develop new business models. Companies that are able to leverage digital technologies can offer more personalized products and services, improve customer experience, and explore new market opportunities. This ability to continuously innovate is closely related to the concept of dynamic capabilities, which refers to a firm's capacity to adapt, integrate, and reconfigure its resources in response to changing environments (Teece, 2018). Therefore, firms that successfully implement digital transformation are more likely to maintain their competitive advantage in the long term.

Ultimately, from the perspective of RBV, digital transformation can be seen as a strategic driver that enhances firm value. By improving efficiency, supporting innovation, and strengthening organizational capabilities, digital transformation enables firms to achieve better performance and create sustainable value. This is particularly relevant in industries that are experiencing rapid digitalization, where firms that fail to adapt may lose their competitive position. Therefore, the RBV provides a strong theoretical foundation for understanding how digital transformation influences firm value through the development and utilization of strategic resources and capabilities.

### 2.1.2 Stakeholder Theory

Stakeholder Theory provides a broader perspective on how firms create value by emphasizing the importance of managing relationships with various stakeholders. Unlike traditional views that focus primarily on maximizing shareholder wealth, Stakeholder Theory argues that firms have responsibilities toward a wide range of stakeholders, including investors, customers, employees, suppliers, communities, and regulators (Freeman, 1984). These

stakeholders can both influence and be influenced by the firm's activities, making their interests an essential consideration in corporate decision-making.

According to this theory, firms that effectively manage stakeholder relationships are more likely to achieve long-term success and sustainability. This is because maintaining positive relationships with stakeholders can enhance a firm's reputation, reduce potential conflicts, and increase trust. In this context, value creation is not only measured in financial terms but also in terms of how well a firm meets the expectations of its stakeholders (Donaldson & Preston, 1995). Therefore, companies are increasingly encouraged to adopt strategies that balance economic performance with social and environmental responsibilities.

One of the key concepts that reflects the application of Stakeholder Theory in modern business practices is Environmental, Social, and Governance (ESG) performance. ESG represents a set of criteria used to evaluate how firms manage their environmental impact, fulfill social responsibilities, and implement good governance practices. From a stakeholder perspective, ESG performance can be seen as an indicator of how well a firm responds to stakeholder expectations and addresses broader societal concerns. Companies that demonstrate strong ESG performance are generally perceived as more responsible, transparent, and sustainable.

The importance of ESG has grown significantly in recent years, as investors and other stakeholders increasingly consider non-financial factors in their decision-making processes. Firms with strong ESG performance are more likely to gain investor confidence, attract long-term investment, and enhance their market reputation (Freeman et al., 2010). In addition, effective ESG practices can help firms reduce risks, improve operational efficiency, and strengthen their resilience in times of uncertainty. As a result, ESG performance has become an important factor influencing firm value.

This relationship is particularly relevant in the consumer non-cyclical sector, where firms produce essential goods such as food, beverages, and household products. Companies in this sector have a direct impact on daily consumer life, which makes stakeholder expectations even higher. Consumers are increasingly concerned about product safety, ethical sourcing, and

environmental impact, while regulators also impose stricter standards. Therefore, firms in this sector must pay closer attention to their ESG practices in order to maintain trust and legitimacy.

In conclusion, Stakeholder Theory provides a strong foundation for understanding the role of ESG performance in influencing firm value. By addressing stakeholder expectations and maintaining responsible business practices, firms can build trust, enhance their reputation, and create long-term value. This perspective complements the Resource-Based View by highlighting that value creation is not only driven by internal capabilities but also by how well firms manage their relationships with external stakeholders.

## 2.2 Literature Review

### 2.2.1 Digital Transformation

Digital transformation is a business strategy initiative that incorporates digital technology across all areas of an organization. It evaluates and modernizes an organization's processes, products, operations and technology stack to enable continual, rapid, customer-driven innovation (O'Brien et al., n.d.). Digital transformation differs from conventional business transformation in several aspects, both on a small and large scale. Traditional business transformation is generally considered complete once the desired changes in processes or behavior have been achieved. In contrast, digital transformation is a long-term and continuous process that reshapes how organizations evolve and improve over time. This is mainly because technology is constantly advancing and becoming increasingly integrated into business activities. Building on this concept, digital transformation is also driven by the rapid development of advanced digital technologies. For instance, the growing use of Artificial Intelligence (AI) in generating insights and supporting decision-making highlights that digital transformation often also involves the adoption of AI as a key component (What Is Digital Transformation?, n.d.).

The emergence of advanced digital technologies, such as artificial intelligence (AI), the Internet of Things (IoT), big data analytics, and 3D printing, has significantly transformed how firms operate and compete in the market (Candi and Beltagui, 2019; Urbinati et al., 2019; Clarysse et al., 2022).

These technologies play a crucial role in supporting firms in their digital transformation processes (Oduro et al., 2023). In addition, digital transformation can be understood not only from a technological perspective but also as a gradual and evolving process.

Digital transformation is commonly understood as a multi-stage process consisting of digitization, digitalization, and digital transformation, where each stage reflects a deeper level of technological integration and strategic change within the organization (Verhoef et al., 2021). As firms progress through these stages, the scope and impact of transformation become broader, leading to more significant changes in business strategies and operations. From a broader perspective, digital transformation represents a fundamental organizational change. It refers to a transformation enabled by the innovative use of digital technologies, supported by the effective utilization of key resources and capabilities, with the objective of improving firm performance and redefining its value proposition to stakeholders (Gong and Ribiere, 2021).

Through digital transformation, firms are able to leverage emerging technologies to gain competitive advantages (Matt et al., 2015; Warner and Wäger, 2019). For example, digital technologies enable companies to develop smarter, faster, and more connected products (Porter and Heppelmann, 2014), foster innovation and entrepreneurial activities (Nambisan, 2017), and support organizational flexibility in balancing efficiency and innovation (Vial, 2019). Moreover, digital transformation also influences firms' core operational activities.

Digital transformation is the process by which companies change the value-creating aspects of design, R&D, production, and operations to achieve co-creation of value with stakeholders (Amit and Han, 2017). The adoption of digital technologies not only enhances the speed of business operations and increases the agility of market-oriented activities, which contributes to competitive performance, but also improves operational efficiency, leading to higher output per employee. As digital transformation continues to develop, it also reshapes the dynamic capabilities of firms, enabling them to achieve better overall performance (Ren & Lin, 2024a). In addition, digital transformation enhances data transparency and enables more effective interaction between

firms and stakeholders, which helps reduce information gaps and supporting the improvement of sustainability-related practices (Blankespoor, 2022). These improvements are expected to reduce information asymmetry between firms and investors, thereby strengthening market confidence and supporting higher firm value (Jurnal Acuan).

### 2.2.2 Environment, Social, and Governance

Environmental, Social, and Governance (ESG) refers to a set of standards that represent three key dimensions used to assess a company's sustainability performance. In business practices, ESG is widely utilized as an important consideration in investment decision-making and also serves as a guideline for companies in reporting the impacts of their operations. With increasing global concerns related to climate change, ethical supply chains, environmental degradation, and social welfare, ESG has gained significant attention from investors, regulators, and other stakeholders. As a result, ESG has become an essential factor in investment evaluation and is increasingly integrated into companies' strategic and operational decisions (*What Is ESG?*, n.d.).

In recent years, policymakers and regulators around the world have increasingly emphasized the importance of corporate environmental governance and social responsibility. The growing awareness of these issues has led to greater attention toward environmental and social risks, along with governance-related concerns, and has encouraged significant capital allocation toward sustainable development. As a result, research on Environmental, Social, and Governance (ESG) has gained considerable attention, particularly in examining its impact on firm value .

Previous studies have explored the influence of ESG performance from its three main dimensions, namely environmental performance (Hoepner et al., 2020; Martin & Moser, 2016; Pekovic et al., 2018), social responsibility performance (Albuquerque et al., 2019; Mishra & Modi, 2013), and corporate governance performance (Drakos & Bwkdiris, 2010; Petersen, 2009). The findings generally indicate that improvements in ESG performance contribute

positively to firms' market value. Moreover, in the presence of extreme risks, such as financial crises and the COVID-19 pandemic, companies with strong ESG performance tend to exhibit more stable market value and greater stock price resilience (Broadstock et al., 2021; Lins et al., 2017).

In this context, digital transformation plays an important role in supporting ESG performance. The integration of digital technologies enables firms to improve data collection, monitoring, and reporting related to environmental and social activities. It also enhances transparency and facilitates more effective communication with stakeholders. As a result, digital transformation can help firms strengthen their ESG practices and improve the overall quality of their sustainability performance.

### 2.2.3 Firm Value

Firm value refers to how the market assesses the overall worth of a company. It reflects not only the firm's current performance but also its potential for future growth. In many financial studies, firm value is commonly measured using market-based indicators, as these measures are considered more capable of capturing investor expectations and providing a forward-looking perspective on the company's prospects.

Firm value has become an important indicator in evaluating a company's performance, especially from the perspective of investors. A higher firm value generally reflects a positive market perception, indicating that the company is performing well and has good future prospects. On the other hand, a lower firm value may signal potential risks or weaker performance. For this reason, companies are encouraged to adopt strategies that not only improve financial results but also strengthen their overall image and credibility in the eyes of stakeholders.

In recent years, the factors influencing firm value have expanded beyond traditional financial aspects to include non-financial elements, particularly those related to sustainability and corporate responsibility. Environmental, Social, and Governance (ESG) performance has become increasingly important, as it reflects how companies manage risks, maintain transparency, and fulfill their responsibilities toward stakeholders. Previous studies show

that strong ESG performance can enhance firm value by improving operational efficiency, reducing financial risks, and strengthening corporate reputation (Broadstock et al., 2021; Lins et al., 2017). In addition, ESG-related disclosures provide useful information about a company's long-term prospects, which can increase investor confidence and positively influence market valuation (Hoepner et al., 2024).

Besides ESG, technological developments have also played a role in shaping firm value. Digital transformation, in particular, allows companies to improve efficiency, support better decision-making, and respond more quickly to changes in the market. The use of digital technologies helps firms manage data more effectively, increase transparency, and improve business processes, which in turn can enhance overall performance and market perception. Therefore, digital transformation is increasingly seen as an important factor in driving firm value in today's business environment.

In this context, firm value can be viewed as the result of the interaction between digital transformation and sustainability practices. Digital transformation can support ESG performance by enabling better data management, monitoring, and reporting, as well as improving communication with stakeholders. As ESG performance improves, companies are more likely to gain investor trust and achieve higher market valuation. This suggests that ESG performance may act as a mediating factor in the relationship between digital transformation and firm value. Therefore, examining these relationships provides a better understanding of how companies create value in an increasingly digital and sustainability-focused environment.

### 2.3 Previous Research

*Table 2.1 Previous Research*

| No | Author(s)                            | Research Title                                                                                                                        | Result                                                                                                                                                                                                                                                                                                                                                                                              | Similar                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Difference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| 1  | Disheng Wang and Xiaohong Xia (2024) | The impact of digital transformation on firms' value: examining the role of ESG performance and the effect of information interaction | Previous studies generally show consistent findings regarding the relationship between digital transformation, ESG performance, and firm value. Digital transformation is found to have a positive impact on firm value, as it helps companies improve efficiency, productivity, and overall performance. In addition, digital transformation also supports the improvement of ESG performance. The | This study shares several similarities with previous research. First, it examines the relationship between digital transformation and firm value, which has been widely discussed in prior studies. Second, this research also considers ESG performance as an important factor influencing firm value. In addition, similar to earlier studies, this research adopts ESG performance as a mediating variable to better understand how digital transformation affects firm | Despite these similarities, there are several important differences that highlight the research gap. Most previous studies tend to focus on general industries or specific developed markets, with limited attention given to particular sectors. In contrast, this study focuses specifically on the consumer non-cyclical sector, which has unique characteristics as it provides essential goods that are continuously demanded by consumers. In addition, previous research has not extensively examined the role of ESG performance as a mediating variable within this specific sector, especially |

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|  |  | <p>use of digital technologies enables companies to manage data more effectively, improve transparency, and strengthen stakeholder engagement, which are important aspects in ESG practices. Furthermore, ESG performance itself is proven to have a positive influence on firm value. Companies with better ESG performance tend to gain higher investor trust, lower risk exposure, and stronger market valuation. Some studies also find that ESG performance plays a</p> | <p>value. Therefore, this study follows the same general framework that links digital transformation, ESG performance, and firm value.</p> | <p>in the context of emerging markets such as Indonesia. The consumer non-cyclical sector is particularly relevant, as companies in this sector face higher pressure related to sustainability, product responsibility, and stakeholder trust. Therefore, this study aims to fill this gap by examining the relationship between digital transformation, ESG performance, and firm value in consumer non-cyclical companies listed on the Indonesia Stock Exchange during the period 2019–2024.</p> |
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|   |                               |                                                                                                  | <p>mediating role in the relationship between digital transformation and firm value, meaning that digital transformation can indirectly enhance firm value through improvements in ESG performance.</p>                                                                              |                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2 | Maha Khemakhe m Jardak (2022) | The Effect of Digital Transformation on firm performance: evidence from Swedish listed companies | <p>This study examines the effect of digital transformation, measured through digital maturity, on firm performance in Swedish listed companies. The findings show mixed results. Digital transformation has a negative effect on short-term financial performance, particularly</p> | <p>This study has several similarities with the current research. First, both studies examine the impact of digital transformation on firm outcomes, particularly in terms of firm performance and firm value. The use of Tobin's Q as an indicator also aligns with this research, as it reflects market perception and future firm prospects.</p> | <p>Despite these similarities, there are several important differences. This study focuses only on the direct relationship between digital transformation and firm performance, without considering ESG performance as a mediating variable. In contrast, the current research introduces ESG performance as an important mechanism that explains how digital transformation can influence firm value.</p> |

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|  |  | <p>on ROA and ROE. This happens because companies tend to increase their investment in technology, which raises costs in the early stages and has not yet been fully reflected in financial outcomes .</p> <p>However, the study also finds that digital transformation has a positive effect on Tobin's Q, which reflects market-based performance and future expectations . This indicates that investors respond positively to digital transformation, even if its financial benefits are not</p> | <p>In addition, both studies highlight that digital transformation plays an important role in shaping firm value, especially from a long-term perspective. The idea that digital transformation sends positive signals to investors is also consistent with this research framework.</p> | <p>In addition, the context of this study is based on Swedish listed companies, which represent a developed and highly digitalized economy. This is different from the current research, which focuses on Indonesia as an emerging market, where the level of digital adoption and ESG awareness may vary.</p> <p>Furthermore, this study does not specifically examine the consumer non-cyclical sector. Considering that companies in this sector have stable demand and strong interaction with consumers, the role of digital transformation and ESG performance may be different and requires further investigation. Therefore, this research aims to fill this gap by focusing on consumer non-cyclical companies in</p> |
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|   |                                    |                                                                                                                                                                                              | immediately visible. In other words, while the short-term impact may appear negative, digital transformation contributes positively to firm value in the long run.                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                     | Indonesia and incorporating ESG performance as a mediating variable.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3 | Aixia Chen, Ling Li, Waseem Shahid | Digital transformation as the driving force for sustainable business performance: A moderated mediation model of market-driven business model innovation and digital leadership capabilities | <p>The study finds that digital transformation plays a significant role in improving sustainable business performance. Firms that invest in digital capabilities, such as digital exploitation and exploration, tend to achieve better performance outcomes. In addition, the adoption of digitalization strategies is shown to positively</p> | <p>This study shares several similarities with the current research. First, both studies emphasize the importance of digital transformation as a key driver of firm performance. In both cases, digital transformation is not viewed as a purely technical change, but as a broader strategic process that affects how firms operate and create value. Second, the study also links digital transformation with</p> | <p>Despite these similarities, there are several differences that highlight the research gap. First, the study focuses on sustainable business performance in general, whereas this research specifically examines firm value as the main outcome variable. This difference is important because firm value reflects market perception and investor evaluation, which is not explicitly addressed in the journal. Second, the mediating mechanism used in the study is market-driven</p> |

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|  |  | <p>influence both business performance and innovation. This suggests that digital transformation is not only about technology adoption, but also about how firms integrate digital strategies into their overall business processes.</p> <p>Another important finding is that market-driven business model innovation acts as a mediating mechanism between digital strategies and sustainable performance. This means that digital transformation contributes to performance</p> | <p>sustainability-related outcomes. While this research uses ESG performance as a proxy for sustainability, the journal similarly focuses on sustainable business performance as an important outcome of digital transformation. This shows a conceptual alignment between the two studies.</p> <p>In addition, both studies recognize that the impact of digital transformation is not always direct, but may occur through certain mechanisms. In this study, ESG performance acts as a mediating variable, while the journal highlights business model innovation as a mediator. This indicates that understanding the mechanism</p> | <p>business model innovation, while this research uses ESG performance as the mediating variable. This suggests that there are alternative pathways through which digital transformation can influence firm outcomes, and ESG provides a different perspective that is more aligned with sustainability and stakeholder concerns.</p> <p>Third, the study adopts a moderated mediation model by incorporating digital leadership capabilities as a moderating variable. In contrast, this research focuses only on the mediating role of ESG performance without including moderating variables, allowing for a more focused examination of the indirect relationship.</p> |
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|  |  | <p>improvement indirectly by enabling firms to develop more adaptive and innovative business models.</p> <p>Furthermore, the study highlights the role of digital leadership capabilities in strengthening this relationship. Firms with stronger digital leadership are better able to leverage digital transformation to achieve sustainable outcomes. Overall, the findings emphasize that digital transformation, combined with strategic capabilities, creates a synergistic effect that</p> | <p>behind digital transformation is important in explaining firm outcomes.</p> | <p>Lastly, the study does not focus on a specific industry or country context, whereas this research specifically examines companies in the consumer non-cyclical sector in Indonesia. This provides a more contextualized understanding of how digital transformation, ESG performance, and firm value interact within a specific setting.</p> |
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|   |                                                                                |                                                                                                           | enhances long-term business performance.                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4 | Magdalen a Marczewska, Scott W. Hegerty, Roma Panwar, and Mariusz K ostrzewski | Digital transformation, ESG, and companies' performance: an exploratory study of the European food sector | The study finds that digital transformation has a positive impact on firm performance, particularly in the European food sector. Firms with stronger digital capabilities, including digital orientation, managerial capability, and technical capability, tend to achieve better performance outcomes. This indicates that digital transformation is not only about adopting technology, but also about how firms integrate it through organizational | This study shares several similarities with the current research. First, both studies highlight the importance of digital transformation as a key factor influencing firm outcomes. In both cases, digital transformation is seen as a strategic process that improves how firms operate and create value. Second, the study also links digital transformation with ESG-related aspects. While this research focuses on ESG performance as a mediating variable, the journal similarly shows that firms engaging in ESG practices tend to achieve | Despite these similarities, several differences can be identified. First, the study focuses on firm performance as the main outcome, whereas this research specifically examines firm value. This difference is important because firm value reflects market perception and investor evaluation, which goes beyond operational performance. Second, the study does not explicitly examine ESG as a mediating variable. Instead, ESG is treated more as an independent or complementary factor. In contrast, this research places ESG performance as a key mechanism that explains how digital transformation influences firm value. |

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|  |  |  | <p>and managerial processes.</p> <p>In addition, the results show that companies engaging in ESG-related practices, such as publishing ESG reports, generally demonstrate higher firm performance. This suggests that ESG implementation contributes positively to firm outcomes and should be considered alongside digital transformation strategies.</p> <p>The study also highlights that the combination of digital transformation and ESG creates a stronger impact on firm</p> | <p>better performance. This indicates a consistent relationship between sustainability practices and firm outcomes.</p> <p>In addition, both studies acknowledge that firm performance is influenced by more than just financial or operational factors. The integration of digital capabilities and ESG practices plays an important role in shaping overall firm performance, which aligns with the conceptual framework of this research.</p> | <p>Third, the study is conducted in the European food sector, while this research focuses on companies in the consumer non-cyclical sector in Indonesia. The difference in geographical and sectoral context may lead to different results due to variations in market structure, regulatory environment, and level of digital and ESG adoption.</p> <p>Lastly, the study emphasizes the role of managerial capability as a key supporting factor, whereas this research does not include managerial capability as a variable. Instead, this study focuses on understanding the mediating role of ESG performance in a more specific framework.</p> <p>Based on these differences, this research aims to provide a more focused and context-specific</p> |
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|  |  |  | <p>performance. Firms that integrate digital innovation with sustainability practices are more likely to improve competitiveness and achieve long-term growth. Furthermore, managerial capability plays an important role in ensuring that digital transformation is effectively implemented and translated into better performance.</p> <p>Overall, the findings emphasize that digital transformation, supported by strong managerial capabilities and ESG integration, acts as a key</p> | <p>understanding of how digital transformation affects firm value through ESG performance in the consumer non-cyclical sector.</p> |
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|   |                                |                                                                                                              | driver of firm performance and sustainable business growth.                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5 | Rawan Masoud and Sarah Basahel | The Effects of Digital Transformation on Firm Performance: The Role of Customer Experience and IT Innovation | The study finds that digital transformation has a positive and significant impact on firm performance. Firms that adopt digital transformation tend to improve their overall performance, highlighting the importance of digital capabilities in achieving competitive advantage. In addition, the study shows that digital transformation also positively influences | This study has several similarities with the current research. First, both studies highlight digital transformation as a key factor influencing firm outcomes, particularly in improving firm performance. Second, both studies recognize that the impact of digital transformation is not always direct. In this study, customer experience and IT innovation act as mechanisms that explain how digital transformation affects performance. Similarly, this research also examines an indirect pathway, where ESG | Despite these similarities, several differences can be identified. First, the study focuses on firm performance as the main outcome variable, whereas this research examines firm value. This difference is important because firm value reflects market-based evaluation and investor perception, rather than internal performance alone. Second, the mediating variables used in the study are customer experience and IT innovation, while this research uses ESG performance as the mediating variable. This indicates that different mechanisms can explain how digital transformation affects |

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|  |  | <p>customer experience and IT innovation. Both variables play an important role in supporting firm performance, with customer experience identified as having the strongest effect among the variables examined. Furthermore, the findings confirm that customer experience and IT innovation act as key mechanisms through which digital transformation enhances firm performance. This suggests that the benefits of digital transformation are not only direct, but</p> | <p>performance acts as a mediating variable between digital transformation and firm value. In addition, both studies emphasize that firms need to develop certain capabilities in order to fully benefit from digital transformation, whether in the form of innovation, customer engagement, or sustainability-related practices.</p> | <p>firm outcomes, and this research offers a sustainability perspective through ESG.</p> <p>Third, the study is conducted in the service sector in Saudi Arabia, whereas this research focuses on companies in the consumer non-cyclical sector in Indonesia. Differences in sector and geographical context may lead to variations in how digital transformation impacts firms.</p> <p>Lastly, the study is based on survey data, while this research uses secondary data from financial and sustainability reports. This difference in data type may also influence the results and their generalizability.</p> <p>Based on these differences, this research aims to provide a more specific understanding of how digital</p> |
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|   |                                   |                                                                                             | <p>also realized through improvements in how firms interact with customers and develop technological innovations.</p> <p>Overall, the study emphasizes that firms need to invest in digital transformation capabilities in order to strengthen competitiveness and improve performance in an increasingly digital business environment.</p> |                                                                                                                                             | transformation influences firm value through ESG performance within a different context and methodological approach.                                                     |
| 6 | Meixuan Zhang and Zongsheng Huang | The Impact of Digital Transformation on ESG Performance: The Role of Supply Chain Resilienc | The study finds that digital transformation has a significant positive impact on ESG performance. Firms that                                                                                                                                                                                                                                | This study is highly aligned with the current research. First, both studies examine the relationship between digital transformation and ESG | Despite the strong similarities, several differences can be identified. First, the study focuses on ESG performance as the final outcome variable, whereas this research |

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|  |  |  | <p>adopt digital technologies are better able to improve their environmental, social, and governance practices, mainly through enhanced monitoring, data management, and resource optimization. In addition, the study shows that digital transformation strengthens supply chain resilience, which in turn contributes to better ESG performance. By reducing supplier and customer concentration, firms are able to diversify their business relationships, lower operational risks, and</p> | <p>performance. In both cases, digital transformation is shown to have a positive impact on ESG outcomes, supporting the argument that digital technologies can enhance sustainability practices. Second, both studies emphasize the importance of mechanisms in explaining how digital transformation affects firm outcomes. While this study uses supply chain resilience as a mediating variable, the current research uses ESG performance as the mediator between digital transformation and firm value. This highlights the importance of indirect relationships in understanding the impact of digital transformation.</p> | <p>extends the analysis by examining firm value as the ultimate outcome. This provides a more comprehensive view by linking sustainability performance with market-based evaluation. Second, the study introduces supply chain resilience as the mediating variable between digital transformation and ESG performance. In contrast, this research positions ESG performance as the key mediating variable that explains how digital transformation influences firm value. Third, the study is conducted using data from Chinese listed companies, while this research focuses on firms in the consumer non-cyclical sector in Indonesia. Differences in institutional environment, regulatory frameworks,</p> |
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|  |  |  | <p>improve overall sustainability outcomes. Another important finding is that digital transformation helps reduce information asymmetry within the supply chain. This allows firms to improve transparency, enhance coordination with stakeholders, and avoid inefficiencies or opportunistic behavior that could weaken ESG performance.</p> <p>The study also highlights that digital transformation enables firms to better respond to stakeholder expectations. By</p> | <p>In addition, both studies are grounded in stakeholder-related perspectives, where digital transformation improves firms' ability to respond to stakeholder expectations, increase transparency, and strengthen accountability.</p> | <p>and market conditions may lead to variations in the relationship between digital transformation and ESG performance.</p> <p>Lastly, the study covers a broader time period (2009–2022), whereas this research focuses on a more recent timeframe (2019–2024), allowing for a more updated analysis of digital transformation and ESG practices.</p> <p>Based on these differences, this research aims to extend the existing literature by examining the role of ESG performance as a mediating variable in the relationship between digital transformation and firm value within a different context.</p> |
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|   |                               |                                                                                          | <p>improving communication and transparency, companies can strengthen their credibility and effectively implement ESG-related strategies. Overall, the findings suggest that digital transformation plays a key role in enhancing ESG performance, both directly and through improved supply chain resilience.</p> |                                                                                                                                                                                   |                                                                                                                                                                                                         |
| 7 | Changman Ren and Xiaoxing Lin | Digital transformation, competitive strategy choices and firm value: evidence from China | <p>The study finds that digital transformation has a positive and significant impact on firm value. Firms that engage more extensively in digital</p>                                                                                                                                                              | <p>This study shares several similarities with the current research. First, both studies examine the relationship between digital transformation and firm value, highlighting</p> | <p>Despite these similarities, several differences can be identified. First, the study focuses on competitive strategies (cost leadership and differentiation) as mediating variables, whereas this</p> |

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|  |  |  | <p>transformation tend to experience higher firm value, indicating that digitalization plays an important role in enhancing market evaluation and long-term growth potential.</p> <p>In addition, the study shows that competitive strategies, specifically cost leadership and differentiation strategies, act as mediating variables in the relationship between digital transformation and firm value. While both strategies contribute to this relationship, differentiation strategy is</p> | <p>digital transformation as a key driver of firm valuation.</p> <p>Second, both studies recognize that the effect of digital transformation is not purely direct, but also occurs through mediating mechanisms. In this study, competitive strategies act as mediators, while in the current research, ESG performance serves as the mediating variable. This shows that different internal mechanisms can explain how digital transformation creates value for firms.</p> <p>In addition, both studies emphasize that digital transformation is a strategic process that goes beyond technology adoption and</p> | <p>research introduces ESG performance as the mediating mechanism. This provides a different perspective by linking digital transformation with sustainability and stakeholder-related outcomes.</p> <p>Second, the study is conducted using data from manufacturing firms in China, while this research focuses on companies in the consumer non-cyclical sector in Indonesia. Differences in industry characteristics and institutional environments may influence how digital transformation affects firm value.</p> <p>Third, the study emphasizes internal strategic choices as the key pathway through which digital transformation influences firm value. In contrast, this research focuses on ESG performance as an external and sustainability-</p> |
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|  |  |  | <p>found to have a stronger mediating effect. This suggests that firms can maximize the benefits of digital transformation by improving their products and services to create unique value in the market.</p> <p>Furthermore, the findings indicate that larger firms tend to adopt digital transformation more intensively, which leads to a higher level of digitalization and, consequently, greater firm value. Overall, the study highlights that digital transformation enhances firm value both</p> | <p>involves broader organizational changes that influence firm outcomes.</p> | <p>oriented mechanism that connects digital transformation with firm value.</p> <p>Lastly, the study covers the period 2010–2019, while this research uses a more recent timeframe (2019–2024), allowing for a more updated analysis in the context of rapid digital and ESG developments.</p> <p>Based on these differences, this research aims to extend the literature by examining ESG performance as a mediating variable in the relationship between digital transformation and firm value within a different context and sector.</p> |
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|   |               |                                                                                     | directly and indirectly through strategic choices.                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 8 | Patrick Velte | Does ESG performance have an impact on financial performance? Evidence from Germany | <p>The study examines the impact of ESG performance on financial performance using both accounting-based and market-based measures. The findings show that ESG performance has a positive effect on accounting-based performance, particularly Return on Assets (ROA). This indicates that firms with better ESG performance tend to achieve higher operational efficiency and profitability.</p> | <p>This study shares several similarities with the current research. First, both studies emphasize the importance of ESG performance in influencing firm outcomes. In both cases, ESG is considered a key factor that reflects how firms manage sustainability and stakeholder-related issues. Second, the study also incorporates market-based measures such as Tobin's Q, which is commonly used as a proxy for firm value. This aligns with the current research, which focuses on firm value as the main outcome variable.</p> | <p>Despite these similarities, several differences can be identified. First, the study focuses on the direct relationship between ESG performance and financial performance, whereas this research examines ESG performance as a mediating variable between digital transformation and firm value. This provides a more comprehensive framework by linking technology, sustainability, and firm outcomes. Second, the study finds no significant effect of ESG performance on market-based measures, while this research assumes that ESG performance can influence firm value through improved transparency, stakeholder trust, and long-term</p> |

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|  |  | <p>However, the study finds no significant relationship between ESG performance and market-based performance, as measured by Tobin's Q. This suggests that while ESG activities may improve internal financial outcomes, their impact on market valuation may not always be immediately reflected.</p> <p>In addition, when ESG is analyzed by its individual components, governance performance is found to have the strongest impact on financial performance compared to environmental and social</p> | <p>In addition, both studies highlight that ESG performance can serve as an important signal to stakeholders regarding a firm's overall quality and long-term prospects.</p> | <p>sustainability. This creates an interesting research gap that needs further investigation.</p> <p>Third, the study is conducted using data from German listed companies, whereas this research focuses on firms in the consumer non-cyclical sector in Indonesia. Differences in regulatory environments and ESG awareness may lead to different results.</p> <p>Lastly, the study covers the period 2010–2014, while this research uses a more recent timeframe (2019–2024), allowing for a more updated analysis in the context of increasing global attention toward ESG practices.</p> <p>Based on these differences, this research aims to further explore the role of ESG performance in influencing firm value, particularly as</p> |
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|   |                                               |                                                                                                              | <p>dimensions. This highlights the importance of corporate governance in driving firm outcomes. Overall, the study suggests that ESG performance plays a role in improving firm performance, although the effect may vary depending on how performance is measured.</p> |                                                                                                                                                                                                                                                                                | <p>a mediating variable in the relationship between digital transformation and firm value.</p>                                                                                                                                                                                                                          |
| 9 | Guangyou Zhou, Lian Liu, and Sumei Luo (2021) | Sustainable development: ESG performance and company market value: Mediating effect of financial performance | <p>The study finds that ESG performance has a positive impact on a company's market value. Firms with higher ESG performance tend to achieve better market valuation, indicating that sustainability practices</p>                                                      | <p>This study is highly relevant to the current research. First, both studies examine the relationship between ESG performance and firm value, highlighting ESG as an important factor influencing market valuation. Second, both studies adopt a mediation perspective in</p> | <p>Despite these similarities, several differences can be identified. First, the study focuses on ESG performance as an independent variable affecting firm value, whereas this research examines ESG performance as a mediating variable that links digital transformation and firm value. This provides a broader</p> |

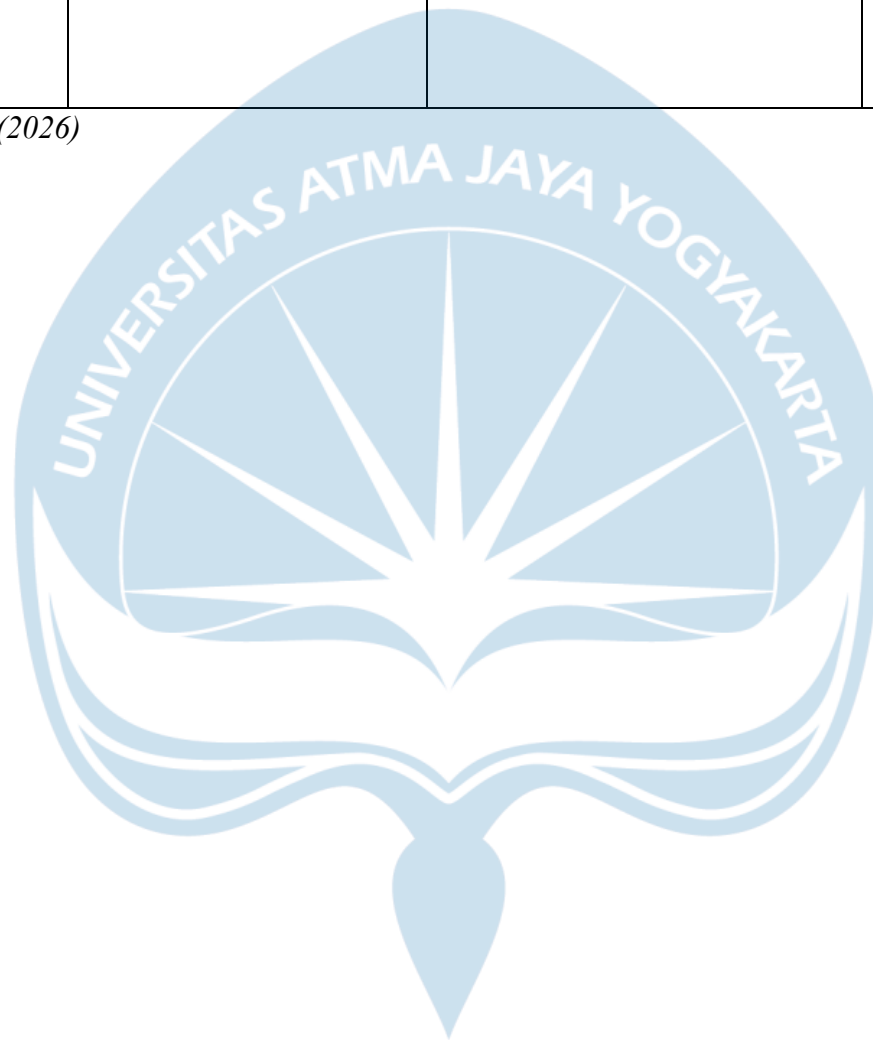
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|  |  | <p>are increasingly valued by investors.</p> <p>In addition, the study reveals that financial performance plays a mediating role in the relationship between ESG performance and market value. This suggests that ESG performance improves firm value indirectly by enhancing firms' operational capacity and overall financial outcomes.</p> <p>More specifically, the findings indicate that ESG performance contributes to improved operating capacity, which serves as an important</p> | <p>explaining firm outcomes. While this study uses financial performance as the mediating variable, the current research positions ESG performance as the mediator between digital transformation and firm value. This similarity reinforces the importance of indirect mechanisms in understanding how value is created within firms.</p> <p>In addition, both studies emphasize that ESG performance reflects firms' ability to manage sustainability issues and stakeholder expectations, which ultimately affects firm outcomes.</p> | <p>framework by integrating technology and sustainability perspectives.</p> <p>Second, the study introduces financial performance as a mediating mechanism, while this research explores ESG performance as the key mediator. This indicates that different pathways can explain how firm value is created, and this research contributes by highlighting the role of sustainability performance.</p> <p>Third, the study is conducted using data from Chinese listed companies, while this research focuses on firms in the consumer non-cyclical sector in Indonesia. Differences in economic environment and ESG adoption levels may influence the relationship between ESG and firm value.</p> <p>Lastly, the study uses data from 2014–2019, whereas this research uses a</p> |
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|  |  |  | <p>pathway through which ESG influences market value. However, ESG performance does not show a significant impact on profitability and growth capacity, highlighting that its effects may vary across different dimensions of financial performance.</p> <p>Overall, the study emphasizes that ESG performance enhances firm value both directly and indirectly, particularly through improvements in operational and financial capabilities.</p> | <p>more recent timeframe (2019–2024), allowing for a more updated analysis in the context of increasing global attention toward ESG and digital transformation.</p> <p>Based on these differences, this research aims to extend the literature by examining how ESG performance mediates the relationship between digital transformation and firm value in a different context.</p> |
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| 10 | Liangliang Han and Fengchao Liu (2025) | Does digital transformation influence corporate financial flexibility reserves? A demand-side perspective | The study finds that digital transformation has a positive impact on firm performance, particularly through managerial capability, digital orientation, and digital capability. Companies that invest more in digital transformation tend to achieve better overall performance. In addition, firms that disclose ESG-related reports also show higher performance on average. This suggests that combining digital innovation with ESG practices can enhance firm competitiveness and long-term growth. | This study is closely related to the current research as both examine the role of digital transformation in improving firm outcomes. Similarly, both studies acknowledge that ESG plays an important role in enhancing firm performance. The idea that digital transformation and ESG can work together to create better firm value aligns directly with the framework of this research, where ESG acts as a mediating variable between digital transformation and firm value. | However, there are several differences. First, the study focuses on the European food sector, while this research examines companies in Indonesia, specifically in the non-cyclical sector. Second, the previous study does not explicitly test ESG as a mediating variable, but rather treats ESG reporting as an additional factor influencing performance. Third, the measurement of firm performance differs, as this study uses composite performance indices, while the current research uses firm value (Tobin's Q) as a proxy. Therefore, this research extends the existing literature by explicitly analyzing the mediating role of ESG performance in the relationship between digital transformation and firm value in a |
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*Source: Compiled by the Researcher (2026)*



## 2.4 Hypothesis Development

### 2.4.1 Digital Transformation and Firm Value

Digital transformation has become an important strategy for firms in improving their competitiveness and overall performance. By integrating digital technologies into business processes, companies are able to enhance operational efficiency, optimize decision-making, and respond more effectively to changes in the market environment. From the perspective of the Resource-Based View, digital technologies can be considered as strategic resources that enable firms to create value and sustain competitive advantage.

In addition, digital transformation also improves information transparency and reduces information asymmetry between firms and investors. This allows investors to better assess a company's performance and future prospects. Firms that actively adopt digital technologies are often perceived as more innovative and adaptable, which can positively influence market perception and increase firm value. Previous studies have also found that digital transformation contributes to firm value through improved performance and stronger competitive positioning.

**H1: Digital transformation has a positive effect on firm value.**

### 2.4.2 Digital Transformation and ESG Performance

Digital transformation also plays an important role in supporting the implementation of ESG practices within firms. The adoption of digital technologies enables companies to improve data collection, monitoring, and reporting related to environmental and social activities. For instance, digital systems can help firms track resource usage, manage supply chains more transparently, and monitor sustainability-related performance more effectively.

Furthermore, digital platforms facilitate better communication and interaction between firms and stakeholders, allowing companies to better understand stakeholder expectations and respond accordingly. This increased transparency and accountability can strengthen ESG performance, particularly in terms of environmental management, social responsibility, and governance

practices. Therefore, digital transformation can be seen as an enabling factor that supports firms in improving their ESG performance.

**H2: Digital transformation has a positive effect on ESG performance.**

**2.4.3 ESG Performance and Firm Value**

ESG performance has increasingly become an important factor in determining firm value, as investors and other stakeholders place greater emphasis on sustainability and responsible business practices. From the perspective of Stakeholder Theory, firms are expected to create value not only for shareholders but also for a wider group of stakeholders. Companies that demonstrate strong ESG performance are more likely to gain trust, enhance their reputation, and maintain long-term relationships with stakeholders.

In addition, strong ESG performance can help firms reduce risks, improve operational efficiency, and increase resilience in uncertain environments. Investors often view companies with good ESG practices as more stable and sustainable, which can positively influence their investment decisions. As a result, firms with higher ESG performance tend to achieve higher market valuation and firm value.

**H3: ESG performance has a positive effect on firm value.**

**2.4.4 The Mediating Role of ESG Performance**

Based on the relationships discussed above, ESG performance may act as a mediating variable in the relationship between digital transformation and firm value. Digital transformation enhances firms' capabilities in managing data, improving transparency, and supporting sustainability-related activities. These improvements contribute to better ESG performance, which in turn strengthens stakeholder trust and increases firm value.

In this context, digital transformation does not only have a direct impact on firm value, but also an indirect effect through ESG performance. This indicates that ESG performance plays an important role in explaining how digital transformation contributes to value creation. Therefore, examining the

mediating role of ESG provides a more comprehensive understanding of the relationship between digital transformation and firm value.

**H4: ESG performance mediates the relationship between digital transformation and firm value.**



## 2.5 Conceptual Framework

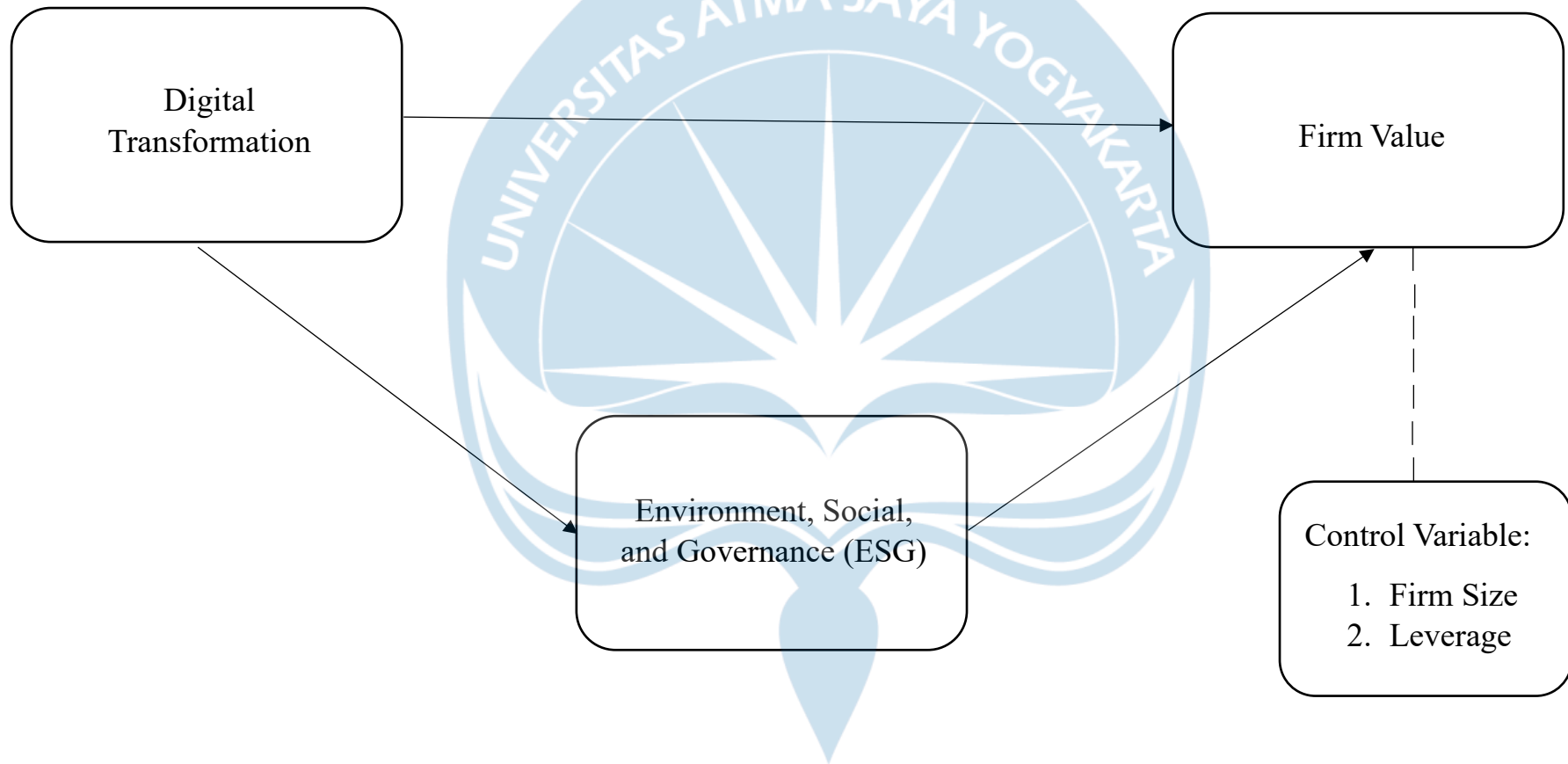


Figure 2.1 Conceptual Framework  
Source: Data Processed (2026)