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An examination of the relationship between the national digital transformation strategy and Vietnam's dedication to sustainable development from a policy and practice standpoint.

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Abstract:
This study provides a comprehensive overview of the relationship between Vietnam's national digital transformation strategy and its commitment to sustainable development. Through the analysis of important policy documents such as the National Digital Transformation Program to 2025, the orientation to 2030 and the Voluntary National Review Reports (VNR) on the implementation of the Sustainable Development Goals (SDGs), the study identifies similarities, complementarity as well as potential contradictions between digital innovation and sustainable development goals. The research methodology combines policy analysis with a practical overview of implementation in areas such as education, health, environment and public governance. The results show that digital transformation plays a catalytic role in improving transparency, efficiency and access to services, thereby contributing to promoting economic growth, social inclusion and environmental protection. However, the study also points to challenges such as digital inequality, data security, and limited institutional capacity, which can hinder the achievement of comprehensive sustainable development outcomes. The article concludes with policy recommendations aimed at harmonizing the two agendas, emphasizing intersectoral coordination, enhancing digital capacity, and establishing a monitoring mechanism in line with the SDGs. researchers and development practitioners are interested in the relationship between digital transformation and sustainable development in Vietnam.

Keywords: *digital transformation, digital data, sustainable development, Vietnam*

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I. Introduction

In the modern era, the world is witnessing a strong and far-reaching wave of transformation, driven simultaneously by two major trends: *digital transformation* and *sustainable development*. This parallel combination, often referred to as *the twin transition*, not only reshapes the socio-economic structure but also opens up new development models where technology and sustainability become two inseparable pillars. According to Accenture's *report "Twin Transition: How Digitalization Can Foster a Sustainable Future"* (2021), if implemented effectively, dual transformation can create an additional $4.5 trillion for the global economy by 2030, while helping to reduce greenhouse gas emissions by up to 20%. This shows that, Economic development and environmental protection are no longer two conflicting goals, but can be completely co-advanced through taking advantage of the power of technology and data.

In the dual transformation process, **data** emerges as a core strategic resource – likened to the **new fuel** of the digital economy and **a roadmap** for sustainable development strategies. Data not only helps optimize production, operation and distribution processes, but also plays a key role in monitoring environmental, social, and governance (*ESG*) indicators, thereby supporting policymakers and organizations to adjust their behavior towards sustainability goals. On the other hand, in the context of climate change, resource decline and rising inequality, **sustainable development** has become a global strategic destination, concretized in **the 2030 Agenda** of the United Nations (2015) with 17 sustainable development goals (SDGs). No country, business, or community can stand aside from this effort. Therefore, understanding and effectively exploiting the role of data in the dual transformation process is not only a technological requirement, but also an urgent requirement of a long-term

development strategy, in order to achieve harmony between economic growth and economic growth. social progress and environmental protection.

Although the prospects of dual transformation are enormous, implementation practices show that the process is facing many complex and multidimensional challenges. One of the key bottlenecks lies in how data is collected, managed, analyzed and applied to simultaneously serve the goals of digitalization and sustainable development. Many organizations and countries today still exploit data primarily from the perspective of optimizing operations or improving short-term business efficiency, while the potential of data as a tool for long-term sustainability has not been fully exploited. According to *the World Economic Forum report* (2022), only about 9% of global businesses said they integrate ESG data into their daily business decisions, indicating a large gap between commitment and execution. In addition, the lack of integrated models that enable the connection of operational data with sustainable data, along with standardization, security, and privacy challenges, further increases the complexity of the dual transformation process. This reality poses an urgent need to build new theoretical frameworks and operating models, in which data is not only an auxiliary factor, but actually becomes **the central driving force** shaping the entire dual transformation strategy.

In addition, in many developing economies, including Vietnam, the process of digital transformation and the implementation of the Sustainable Development Goals is still sporadic, lacking systemic linkage. According to *the Vietnam Digital Transformation Report 2023* of the Ministry of Information and Communications, although 60% of small and medium-sized enterprises have started to apply digital technology, only 15% of them have a strategy to link technology with sustainable development, showing the urgent need for clearer directions. This paper focuses on solving the central problem: how data can become a driving force for dual transformation in a substantive, efficient and sustainable way, rather than just stopping at local or short-term applications. This paper aims to analyze the role of data as a central driver in the dual transformation process - where digitalization and sustainable development are not only parallel but also mutually reinforcing.

II. Methodology

2.1. Research Approach

This article uses **the policy analysis and secondary data synthesis approach**, in order to clearly identify the role of data as a driving force in the dual transformation process (digital transformation and green transformation), as well as the connection between data exploitation and towards sustainable development goals. This approach allows for the analysis of global and national trends based on reports, strategies, and factual data from international organizations and government agencies. This approach is particularly useful when evaluating interdisciplinary phenomena such as dual transformation, where the relationships between data, technology, environment and institutions need to be looked at holistically.

2.2. Data sources and selection criteria

Data is mined from reputable and official secondary sources:

International sources: Reports and databases from:

- *European Commission* (2020, 2022) - Báo cáo "A European Green Digital Coalition" và "Shaping Europe's Digital Future".
- *OECD* (2023) – "Data governance for growth and well-being".
- *World Economic Forum* (2022) – "The Net Zero Guide for Digital Industries".
- *UNEP* (2021) – "Digital Transformation for Sustainable Development in Asia".
- *World Bank* (2023) – Data on the digital economy, sustainable development, and ESG.

Vietnamese sources:

- *National Strategy for the Fourth Industrial Revolution to 2030* (Prime Minister, 2021).
- *The National Digital Transformation Program to 2025, with a vision to 2030*.
- *Ministry of Information and Communications* – National Digital Transformation Annual Report (2020–2023).
- *General Statistics Office* – Statistical Yearbook and thematic publications on productivity, digitalization, and the environment.

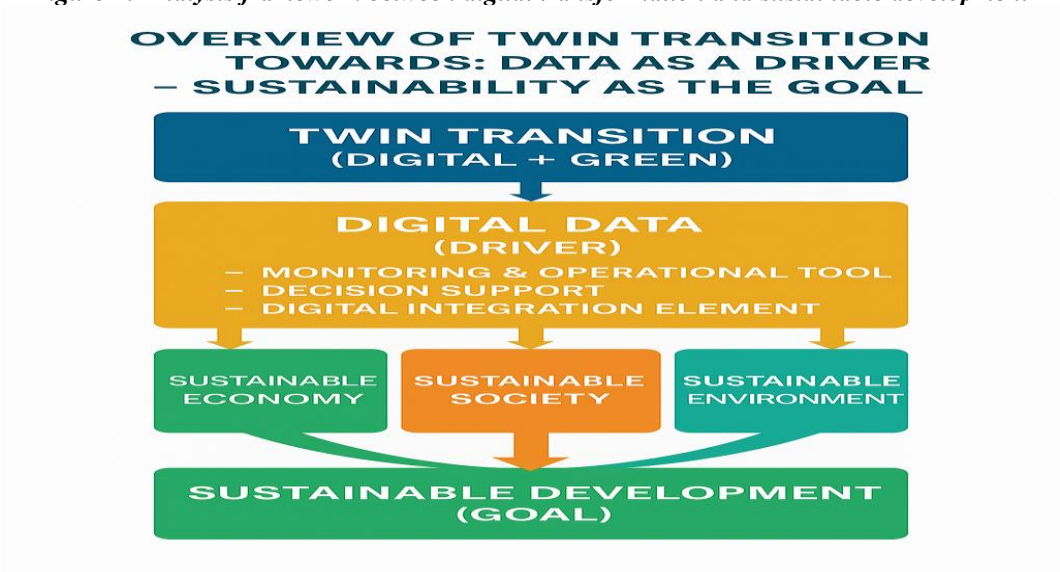
The documents are selected based on three main criteria:

Update: Publication period from 2019 to 2024.

Legitimacy: Source from a reputable state agency or international organization.

Content: The document addresses the link between digital data, green transformation, and sustainable development.

Figure 1: Analysis framework between digital transformation and sustainable development



Source: compiled from the author

2.3. Processing and analysis methods

Qualitative content analysis: Applied to synthesize key arguments in a document, determining how countries and organizations position the role of data in dual transformation.

Comparative analysis: Used to compare approaches between the EU and Vietnam in integrating data into digitalization and sustainable development policies.

Trend analysis: Applied when compiling data from multi-year reports to identify changes in strategy and policy direction.

III. Results and findings

Twin transition is a concept widely popularized from European Commission documents (*2020*), describing the parallel and reciprocal process between digital transformation and green transformation to achieve comprehensive sustainable development goals. Accordingly, digitalization not only improves operational efficiency, but is also the key to supporting initiatives to reduce carbon emissions, optimize resources, and build a circular economy. *The European Green Deal* (2019) emphasizes that digital technologies — from big data (Big Data) to artificial intelligence (AI) to the Internet of Things (IoT) — will play a fundamental role in achieving environmental and social goals. Successful digital transformation will open up the ability to control real-time emissions, optimize sustainable supply chains, and improve the ability to forecast environmental risks. In this context, data has become an essential "soft infrastructure" factor, helping to connect these two seemingly separate transformation processes into an integrated strategy, towards green and inclusive growth.

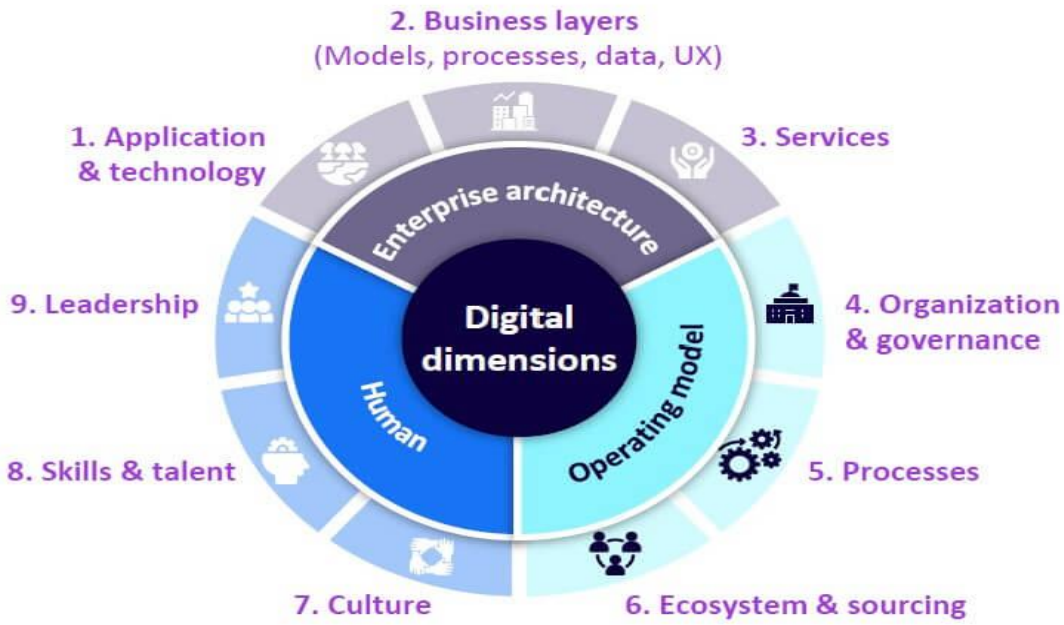
Figure 2: Chain process of sustainable economic activities

Nguồn: The Circular Economy: A Pathway to Sustainable Future(2024)

The role of data in digital transformation and sustainable development

According to the *World Economic Forum* report (2022), data is present as an "essential resource of the 21st century", and at the same time an indispensable factor to optimize both axes: business efficiency and sustainable efficiency. In digital transformation: Data drives intelligent automation, data-driven decision making, and the development of new business models. According to *the International Data Corporation* (IDC, 2022), businesses that use data effectively are likely to achieve growth 30% faster than their competitors. In sustainability: Data supports monitoring ESG (Environmental, Social, and Governance) goals, measuring real-time socio-environmental impacts, and optimizing resource use. *The United Nations Environment Programme* (UNEP, 2021) emphasizes that accurate and timely environmental data is key to designing policies to mitigate climate risks and ecological losses. However, the *World Bank report* (2023) notes that the current challenge is not just "collecting a lot of data", but more importantly the ability to "transform data into real value that serves sustainability goals".

Figure 3. Digital dimensions to consider



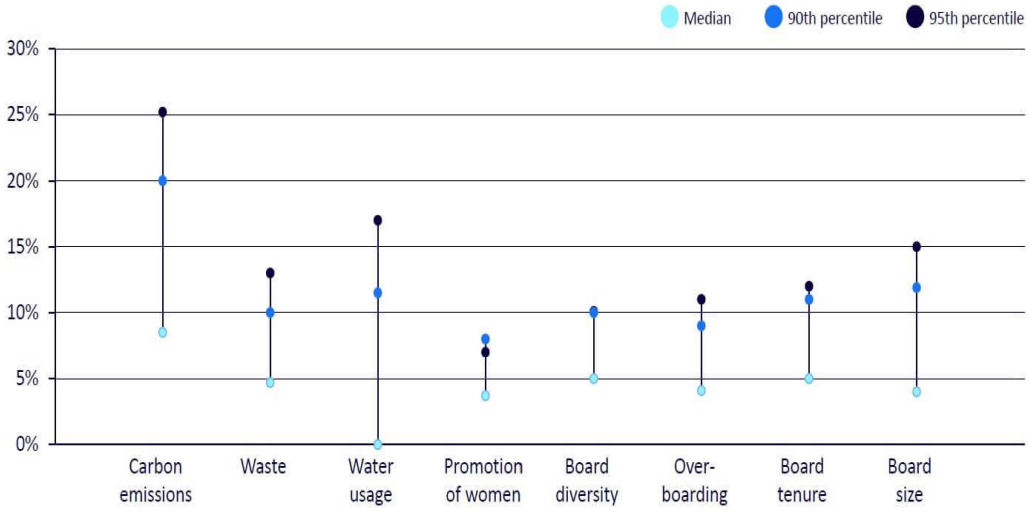
Source: Arthur D. Little

In Vietnam, according to *the 2023 Digital Transformation Index Report* of the Ministry of Information and Communications, while 70% of businesses have a digital transformation strategy, only about 20% have a clear integration strategy with sustainable development goals, showing the urgent need for integrated data models. However, what is missing in many current studies is the cohesion between data reasoning as a "central thrust" and practical models applied at the enterprise and national levels, especially in the context of developing economies. This is also the gap that this article aims to fill.

3.2. Data helps optimize operations and production processes

In the digital era, data has gone beyond its supporting role, becoming **a core strategic resource** to promote both processes: **digital** transformation and **green transformation** – collectively known as dual transformation. According to the World Economic Forum's "The Future of Data" report (2020), data exists as a "new fuel" to help shape sustainable production, consumption, governance and innovation models. Big Data, artificial intelligence (AI) and the Internet of Things (IoT) are being strongly applied to optimize production processes and manage resources. For example, McKinsey's report "How companies capture the value of sustainability" (2023) shows that businesses applying data analytics to the production process can reduce energy costs by an average of 10–20% and reduce the amount of materials used by up to 15% thanks to forecasting and automatic adjustment models. A specific example is Siemens Group, through its industrial data platform MindSphere, which has helped manufacturing plants in Germany and Sweden cut energy consumption by 30% in just 2 years (Siemens Sustainability Report, 2022). The integration of real-time data and machine learning algorithms allows the system to adjust itself to specific operating conditions, rather than relying on traditional fixed processes.

Figure 4. Increase in shareholder valuation by adoption of ESG best practices



Source: Arthur D. Little; Mercereau, Benoît, et al. "Creating Shareholder Value Through ESG Engagement." *Journal of Asset Management*, Vol. 23, No. 7, December 2022

Data in climate change forecasting and adaptation

Data also plays a central role in forecasting and responding to climate change – an important pillar of the green transition. According to the World Meteorological Organization's (WMO) "State of Climate Services 2022" report, more than 100 countries are using meteorological, hydrological and remote sensing data to build early warning systems, which significantly reduce damage to people and property caused by natural disasters. In Africa, the ClimDev-Africa program uses satellite data to analyse drought risk, thereby providing accurate information to people and local governments in adjusting crops and allocating irrigation water. Thanks to this application, drought damage in dry farming areas has decreased by an average of 23% compared to the previous period (African Development Bank, 2021). Open data and public data sharing (Open Government Data) creates conditions for communities, businesses and researchers to jointly develop innovative solutions for green transformation. According to the UN Global Pulse's "Data for Climate Action" report (2021), more than 300 green technology applications in G20 countries have been developed based on open data, focusing on areas such as renewable energy, waste management, sustainable transportation, and smart agriculture. A prime example is the "AgriDigital" system in India, developed based on land, weather and market demand data, helping farmers adjust their farming practices towards low emissions and resource savings. As a result, more than 2 million smallholder farmers have increased their income by 25% and reduced their irrigation water use by 18% (World Bank, 2022).

The role of digital transformation in sustainable development

In many current documents and policies, digital transformation is often considered the center, and sustainable development is expected to be a positive consequence. However, this approach carries the risk of technical bias, as digitalization is not guided by a long-term, harmonious and comprehensive development orientation. Global practice shows that, without a clear sustainable development orientation, the application of technology can create negative consequences such as digital differentiation, increasing inequality, environmental pollution and erosion of social trust. Dual transformation – which is the integration of digital transformation and green transformation – needs to be approached in the direction of putting **sustainable development as the ultimate strategic goal**. This requires not only optimizing technology, but also redesigning the entire data system. institutions and resources to serve the core values: inclusive growth, social justice, environmental responsibility, and long-term resilience. Therefore, in order for the dual transformation to bring real and long-term value, sustainable development needs to be positioned as a strategic destination, and data and technology must be seen as a means of directing and supporting the achievement of that goal.

Pillars of sustainable development

Sustainable Economy

Data is becoming a strategic asset to promote sustainable economic growth, especially in the context of digital transformation and net zero emission commitments. The collection, analysis, and use of big data, artificial intelligence (AI), and digital platforms have been reshaping value chains, optimizing production and business processes, and expanding the creative space and green startups. According to the World Bank (2022), data helps improve efficiency in agriculture through early warning systems, soil nutrient maps, and accurate meteorological

forecasts, thereby increasing productivity and reducing resource waste. In the industry, data technologies help monitor energy consumption in real time, thereby regulating operations and reducing emissions, such as the smart factory model deployed by Siemens AG (2022).

At the macroeconomic level, data plays a central role in measuring and managing "green growth" through indicators such as the resource efficiency index, the share of the digital economy in GDP, or the share of renewable energy in total energy consumption (UNEP, 2020). As a result, governments can make evidence-based policies, allocate budgets effectively to green economy sectors, and monitor environmental impacts transparently. A typical example is **Estonia**, a country that has integrated the entire taxation, licensing, and business transaction system through a digital data platform, which significantly reduces transaction costs, increases labor productivity, and attracts investment in green technology industries (World Economic Forum, 2020).

Figure 5: Data integration and sustainable development

Source: Compiled from the author

In the ASEAN region, **Singapore** and **Malaysia** are developing data systems for carbon pricing and carbon credit trading, contributing to the establishment of a transparent carbon market – a strategic step for circular economy growth and low emissions (Asian Development Bank, 2023). Thus, data is not only a technical support tool but also a key "soft infrastructure" to promote the transition from a traditional economic model to a digital-green economic model, where growth and sustainability are not an exclusionary option but two goals that can be achieved together through data and technology.

Sustainable Society

In the journey towards sustainable development, in addition to economic and environmental performance, data plays a key role in strengthening the social pillar – ensuring equity, inclusion and resilience for vulnerable populations. First of all, data helps to identify inequality in a more detailed and transparent way. Demographic, social and public service data systems allow analysis by gender, age, ethnicity, income, region of residence, etc., thereby pointing out forms of inequality in access to education, health, employment or social security. For example, **the OECD (2021)** said that integrating education data with regional and household income data helps to detect lagging regions in terms of access to quality education early, thereby making reasonable adjustment policies.

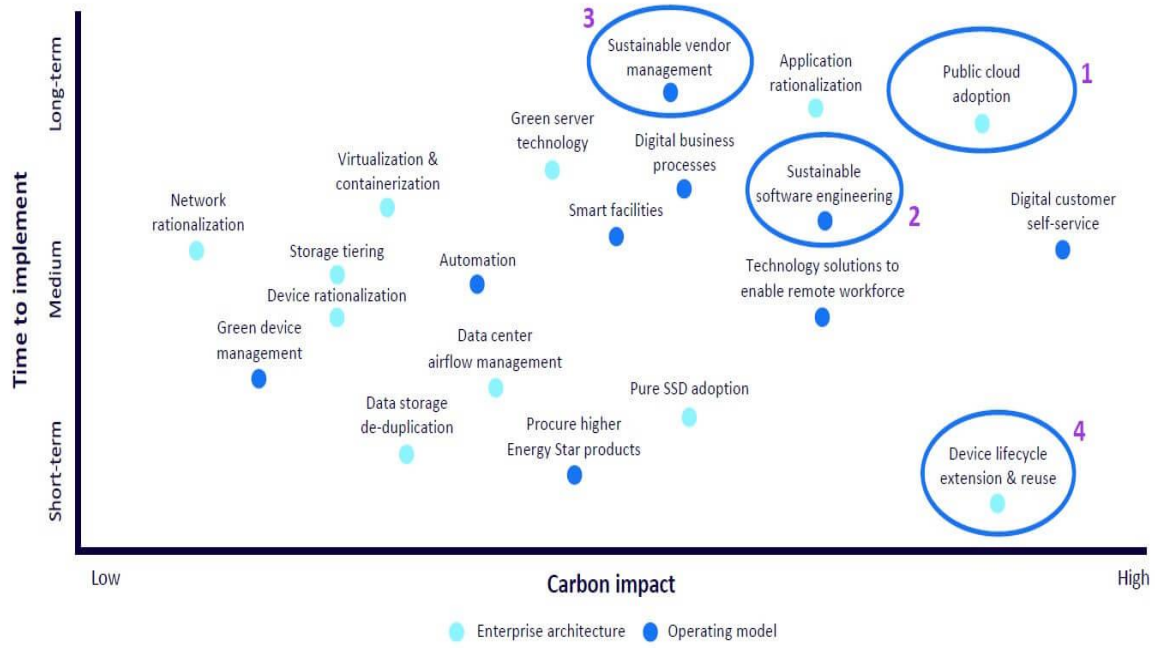
In the context of climate change and global epidemics, real-time data helps build early warning systems and vulnerability maps to protect vulnerable groups such as the elderly, people with disabilities, or residents living in disaster-prone areas. According to **the United Nations Global Pulse (2022),** the use of telecommunications data, social media, and environmental sensors has helped countries such as the Philippines and Bangladesh improve their ability to warn of floods and mobilize relief resources quickly. On the other hand, data promotes equitable access to public services. The digitization of data and the construction of open data platforms help increase transparency and efficiency in budget allocation, fight corruption, and improve the effectiveness of social support programs. In **Rwanda**, digital identification data (digital ID) is integrated with health and social security

data systems, helping millions of rural people access health insurance for the first time in their lives (World Bank, 2021). Another important aspect is that data helps strengthen social resilience after a crisis. Governments can rely on big data to make quick policy decisions, such as allocating relief budgets during the COVID-19 pandemic, supporting unemployment, or retraining the affected workforce. According to the ILO (2022), countries with strong labor data platforms have responded more quickly and effectively to economic and social shocks.

Sustainable Environment

In the context of global environmental crises that are increasing in both intensity and frequency, data has become an indispensable tool for monitoring, forecasting and managing environmental challenges, from air quality, water, forests to climate and biodiversity. Data helps improve the capacity to monitor the environment in real time. Environmental sensors, satellite imagery, and remote sensing data allow for continuous data collection on air quality, water, forest cover, soil salinity, greenhouse gas concentrations, and more. Platforms such as *Global Forest Watch* or *the Copernicus Climate Change Service* have assisted developing countries in monitoring deforestation and climate change without making significant infrastructure investments (World Resources Institute, 2023).

Figure 6. Example levers to reduce the digitalization sustainability impact



Source: Arthur D. Little

Data supports decision-making to manage resources efficiently and sustainably. Data on water, energy, and land use needs can be integrated with ecological data to design more equitable and sustainable resource allocation policies. For example, in India, an integrated agricultural data system has helped to adjust irrigation schedules in accordance with weather fluctuations, reducing water use by up to 20% without affecting crop yields (FAO, 2022). Data plays an important role in risk forecasting and building capacity to respond to climate change. Climate forecasting models use decades of meteorological and ocean data to help provide early warning of extreme events such as heat waves, hurricanes, floods or droughts. Countries such as Vietnam, Bangladesh and Mozambique have integrated climate forecast data into urban and agricultural planning, significantly reducing economic and human losses (UNEP, 2021).

Finally, data plays a critical role in transparency and monitoring of emissions reduction commitments and climate action. *The Climate Watch system* and updated national contribution reports (NDCs) submitted by countries under the Paris Agreement are based on quantitative data to track progress in implementing climate commitments. As a result, the international community can assess the seriousness and effectiveness of environmental policies in each country. Thus, data is not only a "magic eye" to monitor the environment but also a "directional map" to help people respond smarter to climate change, towards a future of sustainable and highly resilient environmental development.

The role of data in the institutionalization of sustainable development goals

In order for sustainable development not only to be a declarative strategic direction, but to become a measurable and monitorable policy practice, the institutionalization of sustainability goals through data plays a key role. The data not only helps governments and organizations assess the progress of implementing sustainability commitments (SDGs), emission reductions (NDCs), or social responsibility, environment, and corporate governance (ESG), but also provides a foundation for evidence-based policymaking. In the context of the growing need for transparency and accountability, data helps quantify targets, track progress, identify vulnerable groups, and assess the impact of policies. Platforms such as digital ESG reports, real-time climate indicators, or digital maps of the SDGs in many countries are contributing to improving governance efficiency and strengthening social trust. Thus, data is not only an operational tool, but also a means of institutionalizing sustainable development – turning commitments into concrete actions, which can be monitored and adjusted in a timely manner in the dual transformation process.

In order for data to become a real driving force for sustainable development, it is necessary to converge many factors such as political commitment, digital capacity of the workforce, cooperative ecosystem and investment capacity. In addition to favorable conditions, Vietnam is also facing many challenges in terms of infrastructure, data governance, digital distance and deployment costs. The following table summarizes the main success conditions and barriers in the process of data exploitation for sustainable development goals. The table below summarizes the key success factors and challenges in data mining for the Sustainable Development Goals in Vietnam, helping to paint a more complete picture of the current implementation environment.

Figure 7. Success and Challenge Conditions for Dual Transformation

Element	Success Conditions	Current challenges
1. Political Commitment	High-level political commitment promotes the integration of data into national strategies and legal frameworks, ensuring transparency and monitoring of progress on the SDGs/NDCs.	Despite institutionalization efforts, the implementation of the policy is still slow, there is a lack of data interconnection mechanism between sectors, and a complete digital monitoring system has not yet been formed.
2. Digital Capabilities of the Workforce	Appropriate digital skills training helps workers exploit and use data effectively, increase productivity and national competitiveness.	Differences in digital capacity between sectors and localities; lack of data experts with an integrated mindset between technology and sustainable development.
3. Data Collaboration Ecosystem	Cooperation between the state – businesses – research organizations creates an open data ecosystem, promotes creativity and increases the use value of data.	The integration of systems and data sharing between subjects is still limited; lack of specific coordination mechanisms and common technical standards for cross-sectoral data sharing.
4. Data Infrastructure	Large FDI investment in data centers; expand digital infrastructure for data collection, processing, storage and security.	Infrastructure is not synchronized, limited international connection (submarine fiber optic cable), vulnerable (power outage); it is difficult to ensure the continuity and safety of national-scale data.
5. Data Governance	Promulgating the Data Law (2024), aiming to build a clear legal corridor for the ownership, sharing and protection of personal and public data.	The new law is still waiting for implementation guidance; lack of a balanced mechanism between sharing for development and information security in practice.
6. Numerical Gap	The Government has issued a national digital transformation program, focusing on remote areas and disadvantaged groups to narrow the digital divide.	Inequalities in access, skills, and equipment still exist between regions and populations; ethnic minorities and remote areas face difficulties in accessing data.
7. Finance and investment costs	Diversification of capital sources (private, PPP, climate finance); encourage investment in digital technology to serve sustainable goals.	The cost of building a data center is very high (5.5–10 million USD); Many businesses, especially in the small and medium-sized private sector, find it difficult to access finance to invest in modern data infrastructure.

Source: General author

IV. Discussion

In the dual transformation process – where digital transformation and green transformation take place simultaneously – data is not only a supporting technical tool, but increasingly becomes **a platform for strategic integration** between technology and sustainable development goals. The relationship between data and sustainable development is **a two-way cycle**: data is the input to operational and innovative systems, and it is also the result of policies, actions, and commitments towards sustainable development. Data helps organizations and businesses monitor, evaluate and optimize ESG (environmental, social, governance) activities, thereby driving

operational efficiency and improving the sustainability of business models. However, in the absence of a clear sustainability direction, data – despite its great potential – can still be misused or create negative consequences such as algorithmic bias, privacy violations, or increasing digital inequality. Therefore, dual transformation is not merely about integrating digital technology into green fields, but requires a systematic vision in designing and operating technology solutions with a people- and planet-centric orientation. Data systems should not only be built to process information, but also reflect and reinforce sustainable development values such as equity, inclusion, transparency and accountability. From an institutional and strategic perspective, the responsible collection, processing and use of data not only brings technical efficiencies, but also creates reliable information for the decision-making process, demonstrating the level of commitment of the organization to the SDGs at both the national and international levels. Dual transformation can only succeed if data is placed within the overall strategy, with a data governance mechanism that integrates sustainability principles from the start – from collection, analysis, to sharing and application. Only then will data truly become the central and reliable driving force of the dual transformation process in the digital era. It can be seen that data is not only a technical tool but also a strategic foundation, playing a role in promoting the three pillars of sustainable development. Meanwhile, sustainable development is not a passive consequence, but a destination that needs to be clearly planned in the entire dual transformation process.

The relationship between the national digital transformation strategy and Vietnam's commitment to sustainable development raises a series of important theoretical and practical questions in the current development context. From a policy perspective, digital transformation is not only a process of technological modernization but also a method of innovating the growth model, towards a more transparent, fair and inclusive society. The integration of the Sustainable Development Goals (SDGs) into the digital transformation strategy demonstrates Vietnam's long-term vision to simultaneously address economic, social and environmental challenges. However, implementation practice shows that the gap between policy objectives and actual results is still significant. Many digital initiatives focus on the technical aspect without paying enough attention to social impact, especially for vulnerable groups. This requires redesigning digital transformation programs in the direction of being human-centered and towards digital equity. In addition, although Vietnam has issued many important documents such as the National Digital Transformation Program and the National Strategy for the Industrial Revolution 4.0, coordination between enforcement agencies is still scattered. The lack of an integrated monitoring mechanism between digital transformation indicators and the SDGs is a major weakness that makes the measurement of effectiveness limited. Therefore, the development of an integrated policy framework – both promoting technology and ensuring sustainable development – is an urgent requirement in the coming period.

V. Conclusion

Digital transformation is increasingly becoming an important driving force for sustainable development in Vietnam, especially in the context that the country is actively implementing its commitments to the 2030 Agenda for the Sustainable Development Goals (SDGs). Through an overview analysis of policies and implementation practices in recent years, the study shows that the national digital transformation strategy is not only a technology program, but also a comprehensive development orientation, capable of far-reaching impacts on economic sectors, society and the environment – the three core pillars of sustainable development. The results of the study have shown that many of the contents of the national digital transformation strategy are compatible and complementary to the SDGs, especially in areas such as digital education (SDG 4), digital health (SDG 3), digital governance (SDG 16), and technological innovation (SDG 9). The implementation of open data platforms, e-government, and innovation ecosystems have also contributed to improving management efficiency, increasing transparency, and enabling people to participate more in decision-making processes. This helps to close development gaps between regions, promote equity in access to public services, and strengthen the adaptive capacity of vulnerable communities. However, the study also identifies a number of major challenges that Vietnam needs to overcome to ensure that digital transformation takes place in an inclusive manner and serves well for sustainable development goals. In particular, the prominent is the digital distance between population groups and geographical areas; limitations on digital infrastructure, especially in remote areas; shortage of high-quality human resources and the risk of data insecurity. In addition, the interdisciplinary coordination mechanism in planning and implementing digital transformation policies is still scattered, inconsistent and not really connected to the framework for measuring the progress of the SDGs. From the above analysis, the study recommends a number of policy orientations to strengthen the harmony between the digital transformation strategy and the development program unshakeable. First of all, it is necessary to establish inter-sectoral and inter-level coordination mechanisms to integrate digital transformation indicators into the SDGs monitoring and evaluation system. Second, it is necessary to invest heavily in comprehensive digital infrastructure, focusing on digital skills training for disadvantaged groups and ensuring fairness in the transformation process. Finally, there is a need to strengthen institutional capacity and legal frameworks for data governance, privacy protection, and the promotion of responsible innovation. Overall, the relationship between digital transformation and sustainable development in Vietnam is a potential field, but at the same time, it also poses an urgent requirement for innovation in development

thinking, strengthening systematization in policymaking, and synchronous participation of all levels. sectors, the private sector and people.

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