Contents lists available at GrowingScience

International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

The role of digital green accounting and environment performance on forest sustainable development goals: A case study on customary forest in Papua

Otniel Safkaur[a*], Bill Pangayow[a], Halomoan Hutajulu[a] and Lediana Hanasbey[a]

[a]*Universitas Cenderawasih, Jayapura, Papua, Indonesia*

C H R O N I C L E

Article history:
Received: May 3, 2024
Received in revised format: May 28, 2024
Accepted: July 24, 2024
Available online: July 24, 2024

Keywords:
Digital green accounting
Environmental performance
Forest Sustainable Development Goals
Customary forest

A B S T R A C T

Management of customary forests through green accounting is an important approach in efforts to achieve Sustainable Development Goals (SDGs). Customary forests, which constitute an important cultural and ecological heritage for local communities, are often threatened by unsustainable exploitation (deforestation) activities. Therefore, Green Accounting is a business concept that focuses on the efficiency and effectiveness of long-term resource use in integrating the customary forest environmental functions and providing social benefits. Therefore, the implementation of green accounting in customary forest management aims to measure and monitor the economic, social and environmental impacts of extractive activities on these forests. This research aims to analyze the relationship between digital green accounting variables on financial performance, environmental performance on sustainable development and digital green accounting towards sustainable development. This research method is quantitative causal which tests the relationship between several variables. The population of this research is indigenous community leaders and the sample of respondents for this research is 432 indigenous community leaders determined using a simple random sampling method. Data analysis for this research uses structural equation modelling (SEM) partial least squares (PLS) with data processing tools using SmartPLS 4.0 software. Research data was obtained by distributing online questionnaires using social media. The independent variables of this research are digital green accounting, environmental performance and the dependent variable is sustainable development. The stages of research data analysis are the outer model test including reliability and validity tests and the inner model test including termination tests and hypothesis tests. Based on the results of data analysis, it is concluded that digital green accounting has a positive and significant relationship to financial performance, environmental performance has a positive and significant relationship to sustainable development and digital green accounting has a positive and significant relationship to sustainable development.

1. Introduction

The current economy has given rise to various kinds of environmental problems such as global warming and other industrial activities that have a direct impact on the environment. In its activities, one of the customary forest's goals is to make a profit, but sometimes companies, especially those operating in the industrial sector, are negligent in carrying out their responsibilities to the environment, which results in environmental pollution. The greater the impact caused by customary forest activities on the environment and nature conservation, the accounting field plays a role in environmental conservation efforts, namely through disclosures in customary forest financial reports related to environmental costs. Therefore, with the implementation of green accounting and performance (Pizzi et al., 2020). Customary forest management through green accounting is an important approach in efforts to achieve Sustainable Development Goals (SDGs). Customary forests, which are important cultural and ecological heritage for local communities, are often threatened by unsustainable exploitation (deforestation)

* Corresponding author.
E-mail address otniel_safkaur@akt.feb.uncen.ac.id (O. Safkaur)

ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print)

doi: 10.5267/j.ijdns.2024.7.011

activities. Therefore, Green Accounting is a business concept that focuses on the efficiency and effectiveness of long-term resource use in integrating the customary forest environmental functions and providing social benefits. Therefore, the implementation of green accounting in customary forest management aims to measure and monitor the economic, social and environmental impacts of extractive activities on these forests.

Customary forests, as an important cultural and ecological heritage for local communities, have become the focus in efforts to maintain environmental sustainability and strengthen social welfare. However, often, customary forest management is still faced with serious challenges, especially in the context of unsustainable exploitation activities. To overcome these challenges, a new integrated and holistic approach is needed, and this is where green accounting plays a crucial role. Customary forest management has significant implications for achieving the Sustainable Development Goals (SDGs), which guide global efforts to build a sustainable future (Perwitasari et al., 2020). However, measuring and monitoring the impact of economic, social and environmental activities on customary forests is still a challenge that has not been fully resolved. In this context, green accounting emerges as a promising approach to fill this gap by considering the economic, social and environmental value of customary forests in decision-making (Christ et al., 2024).

The aim of implementing environmental accounting is to increase the efficiency of environmental management by carrying out environmental activities from the perspective of costs and benefits or effects. The management of an organization is expected to carry out activities that are considered important by stakeholders and then report these activities back to stakeholders. Environmental management as a form of corporate concern is now an important topic of discussion. Especially for companies engaged in manufacturing (Klymenko et al., 2021). The production process of manufacturing companies will leave behind waste, if the waste is not processed in such a way, then the customary forest's contribution to the environment will be through pollution. Apart from the application of green accounting, there is also the application of environmental performance within the customary forest. Environmental performance is translated as performance relating to the environment, especially relating to environmental impacts. Environmental performance can be seen through the results of measuring environmental management systems, which are related to the control of aspects of the environment (Ionaşcu et al., 2022).

Green accounting is a way to include and report the consequences of a customary forest operational activities on the environment in the customary forest's financial reports. Green Accounting, namely accounting, seeks to link the environmental budget side with business operation funds. Green accounting also provides a way to create opportunities to reduce energy and natural resources, reduce health risks, and promote the customary forest's competitive advantage (Abdelhalim et al., 2023). Thus, green accounting is an effort to improve the customary forest economy without ignoring the state of the surrounding environment. Green accounting is applied by companies to produce assessments of data in the form of figures about costs and impacts on the environment. The use of environmental accounting concepts for companies encourages the ability to minimize the environmental problems they face. The implementation of green accounting by this customary forest is a form of corporate responsibility towards stakeholders because what stakeholders want is not only to focus on financial value but also to focus on environmental value, namely whether the customary forest cares about the environmental impact of the customary forest operational activities. This research aims to analyze the relationship between digital green accounting variables on financial performance, environmental performance on sustainable development and digital green accounting towards sustainable development.

2. Literature Review and hypothesis development

2.1 Digital Green Accounting

Digital Green Accounting is the process of including environmental costs in the process of preparing financial reports for companies, organizations or institutions using digital platforms (Peng et al., 2023). Green accounting is the process of recognizing, measuring the value, recording, summarizing, reporting and disclosing information on objects, transactions, events or the impact of a corporation's economic, social and environmental activities on society and the environment, as well as the corporation itself in one information reporting package. integrated accounting so that it can be useful for users in assessing and making economic and non-economic decisions. The application of green accounting will encourage the ability to minimize environmental problems faced by companies (Di Vaio & Varriale, 2020). Green accounting is accounting that attempts to link the environmental budget side with business operations funds. Green Accounting can improve environmental performance, control costs, invest in environmentally friendly technologies, and promote environmentally friendly product processes. Environmental accounting or green accounting also provides a means for opportunities to minimize energy, conserve resources, reduce environmental health and safety risks, and promote competitive advantage. Green accounting also provides opportunities to reduce energy and natural resources, reduce health risks, and promote the customary forest's competitive advantage. Thus, green accounting is an effort to improve the customary forest economy without ignoring the state of the surrounding environment (Pizzi et al., 2020).

2.2 Environmental Performance

Environmental performance is the customary forest focus on environmental preservation and overcoming problems with negative environmental impacts that occur because of environmental operational activities. The results of the environmental

management system, which are related to the control of environmental aspects, are called environmental performance (Al-Taani et al., 2022). This environmental performance refers to how much environmental damage is caused by business activities, where if the resulting environmental damage is low, then the customary forest's environmental performance is good and if the environmental damage caused by environmental operational activities has a lot of negative impacts, then the customary forest's environmental performance becomes poor. Companies that have good environmental performance indirectly have good social information so that they can increase customary forest value (Purwanto et al., 2023). Environmental performance also has a good impact on a customary forest. Environmental performance is the work carried out by a customary forest in creating a good environment. The management of an organization is expected to be able to carry out important activities by stakeholders and then report these activities back to stakeholders. Environmental performance management is a form of customary forest's concern for the community. Especially for companies operating in the manufacturing industry (Dutta et al., 2019). Environmental activities and the disclosure of these activities in the annual report cause users of financial reports such as investors, management and creditors to obtain information that helps users of this information in making decisions for customary forest policies related to environmental conservation and management in the future. By disclosing good environmental performance, the customary forest's existence in carrying out customary forest activities will be accepted by the public so that it can achieve good financial performance. Customary forest sacrifices in spending on the environment can reduce the potential for larger costs in the future such as the costs of public demands for environmental damage by industry, the risk of business closure due to sanctions from the government and so on (Bebbington & Unerman, 2018).

2.3 Sustainable Development Goals (SDGs)

The concept of SDGs emerged at the Conference held by the UN in 2012 in Rio de Janeiro on Sustainable Development. This meeting aims to obtain universal goals that can maintain balance in the three dimensions of sustainable development, namely environment, economy and social. The five main foundations of SDGs are in maintaining balance in these three dimensions, namely people, planet, prosperity, peace and partnership. These five main foundations aim to achieve 3 goals by 2030, namely ending poverty, overcoming climate change, and achieving equality (Dahi & Abdullah, 2024). The concept of sustainable development, also known as sustainable development, is defined as meeting the needs of the current generation without compromising the needs of future generations. This is done by fulfilling various technological, economic, social and environmental aspects. The focus of this sustainable innovation is how companies can maintain their impact on human welfare both now and in the future. In other words, the customary forest will make development efforts to improve and prosper the surrounding community in the long term (Kamaruddin et al., 2024). Sustainable development is an important idea in implementing business sustainability to achieve good strategy and performance results. Sustainable development in this research uses three indicators. Where the indicators used are economic and social. These three indicators are important indicators for increasing and improving performance by increasing productivity. A customary forest and its production process must be able to develop the concept of sustainability and an environmentally friendly industry that is integrated, comprehensive and efficient (Castro & Lopes, 2022). Many companies experience problems that arise from companies in increasing their production in the dimensions of customary forest sustainability, such as waste production. Environmentally friendly industrial activities are implemented through green accounting practices in a customary forest. Green accounting itself is a new accounting paradigm which explains that companies do not only focus on profit (profit) but must also be responsible for environmental damage caused by customary forest activities because customary forest activities need to pay for environmental improvements. One of the hopes for the emergence of environmental accounting is to increase the effectiveness of environmental management by evaluating the effectiveness of a customary forest's environmental activities. Therefore, companies need to implement green accounting to improve sustainable development capabilities (Amalya, 2023).

2.4 The Effect of Digital Green Accounting on Environmental Performance

The application of green accounting in companies is proof that the customary forest cares about the environment, through environmental costs in the financial reports issued by the customary forest for the environment. Environmental accounting can also be analogous to a quantitative measurement framework for environmental conservation activities carried out by companies. When a customary forest sees the environment as a customary forest strategy for creating a good image for the public and investors, the customary forest will not avoid the costs it will incur in the environment (Rahman & Islam, 2023). Green accounting is a type of environmental accounting that links environmental benefits with costs for economic decision-making. This economic decision is the decision made by investors to invest in the customary forest. Disclosing environmental costs will show the business ethics carried out by the customary forest, as well as the responsible management of resources. answer. These results show that green accounting has no significant effect on the customary forest's financial performance (Rosamartina et al., 2022). This shows that companies that only aim to increase profits will consider every cost incurred, including environmental costs which reduce the size of profits. When a customary forest manages its environment, the customary forest will allocate its costs through environmental disclosure or environmental costs which can cause a reduction in customary forest profits. Because several companies record environmental costs as administrative and general expenses (Prayuda, 2024). There are environmental costs which are voluntary in annual reports or sustainability reports as investment expenditures because they will gain social legitimacy in the future which will indirectly provide a positive image from stakeholders for the customary forest for its concern for the surrounding environment. When the customary forest has a good image in managing its environment, then the customary forest will be accepted by society. On the other hand, if a customary forest

has little concern for the environment, it will be less likely to implement it. Thus, only companies that have positive information are ready to disclose their environmental activities (Yang et al., 2022).

Environmental disclosure is the disclosure of financial and non-financial information related to the customary forest's social environment. The relationship between environmental disclosure and sustainable development, namely the disclosure of environmental information by companies is a strategy in building a good customary forest image. According to stakeholder theory, a customary forest does not only operate in the interests of its own customary forest but must be beneficial to its stakeholders such as shareholders, creditors, consumers, government, society and other parties.

H_1: *Digital Green Accounting has a positive and significant relationship to the environmental performance of customary forests.*

2.5 The Influence of Environmental Performance on Forest Sustainable Development Goals

Environmental performance is the performance of a customary forest to produce a good and healthy environment around the customary forest. Proper management of environmental performance can help companies implement the concept of sustainable development, even though managing environmental performance requires quite large financing. Based on legitimacy theory, a customary forest must not only show concern for investor rights, but the customary forest is also expected to show concern for the customary forest's environment and social issues. The relationship between legitimacy theory and environmental performance is that a customary forest will lose its legitimacy when there is no alignment between the customary forest's value system and society (Belyaeva & Lopatkova, 2020). Environmental costs are costs incurred or borne by a customary forest in its environmental management activities. In running its business, a customary forest is expected to be able to manage environmental costs so that in the end the customary forest can carry out sustainable development. According to stakeholder theory, a customary forest must also pay attention to the welfare of its stakeholders, where stakeholders can influence the sustainability of the customary forest. Environmental performance is the result of the customary forest's performance to show how much impact or damage is caused by the customary forest's business activities (Feng et al., 2022). Based on the results of the tests that have been carried out, the environmental performance variable for sustainable development shows a probability value greater than the significance value. So it can be concluded that environmental performance does not affect sustainable development.

H_2: *Environmental performance has a positive and significant relationship with forest sustainable development.*

2.6 The Influence of Digital Green Accounting on Forest Sustainable Development Goals

Environmental disclosure is the disclosure of information in the annual report relating to the customary forest's environment. Based on the results of the tests that have been carried out, the environmental disclosure variable for sustainable development shows a probability value that is smaller than the significance value. So, it can be concluded that environmental disclosure has a significant effect on sustainable development. This means that if the customary forest makes environmental disclosures in its annual report, the customary forest will have the opportunity to increase sustainable development (Xu et al., 202s). Based on legitimacy theory, a customary forest will continue to develop in the future if the customary forest cares about the environment in which the customary forest is located. Meanwhile, based on stakeholder theory, companies should not only focus on increasing profits but must also focus on increasing stakeholder welfare. Whereby carrying out green accounting, which is measured by environmental disclosure, it is considered to have contributed to sustainable development, the customary forest can maintain its reputation in society. The implementation of green accounting using environmental disclosure indicators in palm oil companies has a positive and significant relationship in increasing sustainable development (Indriastuti & Varriale, 2023). Companies that report and apply costs related to environmental preservation are proven to be able to increase sustainable development. This research is also in line with other research that says that environmental disclosure is an important factor in achieving sustainable development. However, this research is not in line with other research (Khan et al., 2022) that green accounting as measured by environmental disclosure has no effect in increasing resource efficiency on customary forest sustainability.

H_3: *Digital Green accounting has a positive and significant relationship with Sustainable Development.*

3. Method

This research method is quantitative causal which tests the relationship between several variables. The population of this research is traditional community leaders and the sample of respondents for this research is 432 traditional community leaders who were determined using a simple random sampling method. Data analysis for this research uses structural equation modelling (SEM) partial least squares (PLS) with data processing tools using SmartPLS 4.0 software. Research data was obtained by distributing online questionnaires using social media. The questionnaire was designed to contain statement items with a Likert scale 7. The Likert scale used in this research was (1) strongly disagree, (2) disagree, (3) quite disagree, (4) Neutral, (5) quite agree, (6) agree, (7) Strongly agree. The independent variables of this research are digital green accounting, and environmental performance and the dependent variable is sustainable development. The stages of research data analysis are

the outer model test including reliability and validity tests and the inner model test including termination tests and hypothesis tests. Fig. 1 shows the structure of the proposed study of this paper.

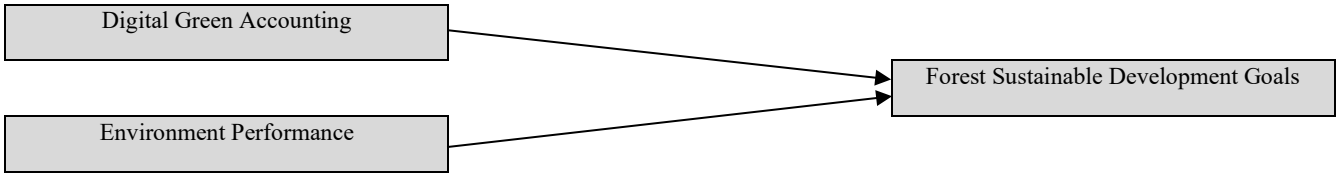

Fig. 1. Research Model

4. Result and Discussion

4.1 Model Scheme Partial Least Square (PLS)

In this research, hypothesis testing uses analytical techniques *Least Square* (PLS) with the SmartPLS program, the following is a schematic of the PLS program model being tested:

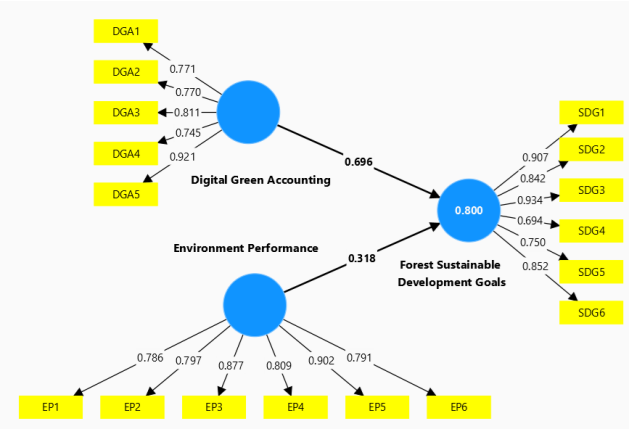

Fig. 2. Outer Model PLS

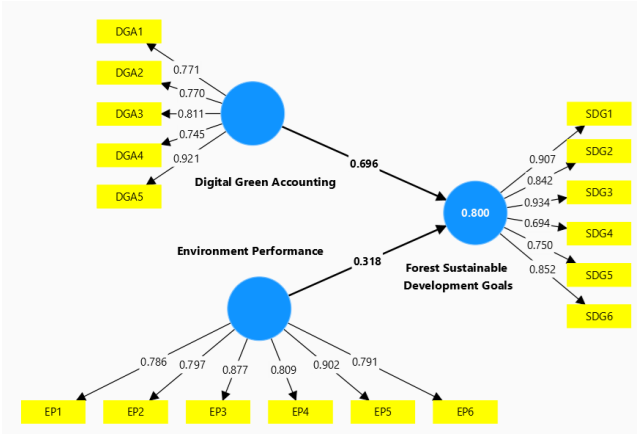

Fig. 3. Inner Model PLS

In Fig. 2 it is shown *that the outer Model PLS* is built from a conceptual framework. This figure explains the relationship between each variable which comes from various theories and previous research. Each variable tested is equipped with indicators built from the relationship between the theories. Analysis model using *partial Least Square* (PLS) can be seen in the next description figure. In Fig. 3 the PLS Inner Model has been processed through the application of *Partial Least Square.* The relationship between the value of each indicator and the value of the relationship between the exogenous variable and the endogenous variable can be seen.

4.2 Discriminant validity

Discriminant validity testing can be done by looking at the average value of the extracted variance (AVE) for all indicators, the value received is > 0.50 for a good model, the results of data analysis obtained the AVE value as follows:

Table 1
Average Variant Extracted (AVE)

Construct Reliability and Validity	Average Variance Extracted (AVE)
Digital Green Accounting	0.764
Environment performance	0.712
Forest Sustainable Development Goals	0.678

Based on Table 1, it is known that the AVE value Total Quality management*, Eco supply chain management, and Business sustainability* > 0.5. Thus, it can be stated that each variable has *discriminant validity*.

4.3 Composite Reliability

A variable can be declared to be satisfactory *composite reliability* when it has value *composite reliability* of each variable used in this research:

Table 2
Composite Reliability

Construct Reliability and Validity	
	Composite Reliability
Digital Green Accounting	0.832
Environment performance	0.918
Forest Sustainable Development Goals	0.823

Based on Table 2 the value *composite reliability* variable Digital Green Accounting, Environment performance and Forest Sustainable Development Goals> 0.60. These results indicate that each variable has met *composite reliability* so it can be concluded that all variables have a high level of reliability.

4.4 Cronbach Alpha

A variable can be declared reliable or satisfactory *Cronbach alpha* when having a Cronbach alpha value > 0.7, the following is the value *of Cronbach alpha* from each variable:

Table 3
Cronbach Alpha

Construct Reliability and Validity	
	Cronbach's Alpha
Digital Green Accounting	0.817
Environment performance	0.934
Forest Sustainable Development Goals	0.832

Based on data analysis in Table 3, the Cronbach alpha value for each eco supply chain management variable, Business sustainability is > 0.70 and it is concluded that each research variable meets the Cronbach Alpha value requirements, so it is concluded that all variables have high reliability.

4.5 Path Coefficient

If the value increases *the path coefficient* of one independent variable on the dependent variable, the stronger the influence of the independent variables on the dependent variable.

4.6 Model goodness test (Goodness Of Fit)

Based on data processing that has been carried out using the SmartPLS program, values are obtained *R-Square Adjusted* as follows:

Table 4
R-Square values

	R Square	R Square Adjusted
Forest Sustainable Development Goals	0.800	0.756

Based on Table 4 the Value *R-Square Adjusted* for Forest Sustainable Development Goals variable is 0.800. This value shows that the large percentage can be explained by *Digital Green Accounting Environment performance* is 90%. Assessment *of goodness of fit* known from the value *q-square*. In regression analysis, where the higher *q-square*, then the model can be said to be better or fitter to the data. Based on the calculation results above, a value is obtained *Q-Square* of 0.834. This shows that the large diversity of research data that can be explained by the research model is 83.4%, while the remaining 16.6% is explained by other factors that are outside this research model. Thus, from these results, this research model can be stated to have *goodness of fit.*

4.7 Test the Direct Effect Hypothesis

An explanation of the partial direct influence hypothesis test can be seen in the following Table 5:

Table 5
Direct T-statistics and P-Values

Hypothesis	T Statistics	P Values	Remark
H1: Digital Green Accounting and Financial Performance	6.896	0.000	Supported
H2: Environmental and Forest Sustainable Development Goals	2.885	0,000	Supported
H3: Digital Green Accounting and Forest Sustainable Development Goals	6.895	0.000	Supported

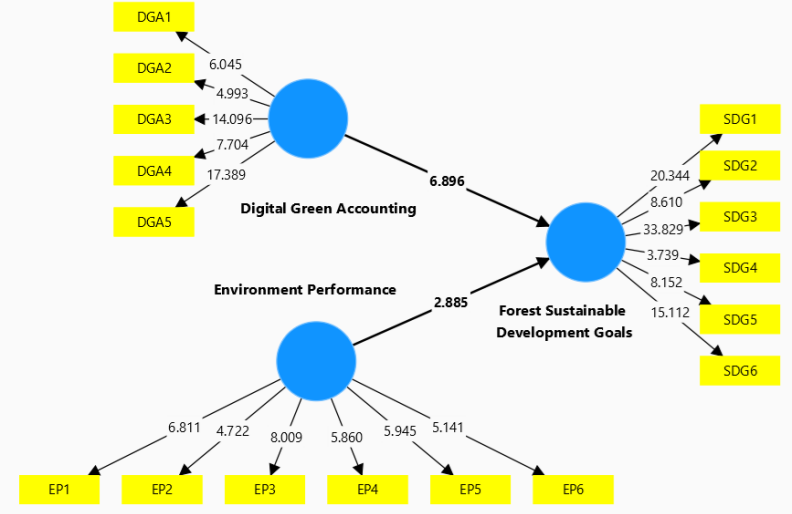

Fig. 3. Hypothesis testing

4.7.1 The Relationship between Digital Green Accounting and Environmental Performance

Based on the results of the SEM-PLS analysis, the p-value of 0.000 is smaller than 0.050, so it can be concluded that Digital Green Accounting has a positive and significant relationship with financial performance. Green accounting is a recommendation for a customary forest's reporting that is linked to the environment to be a source of information regarding the customary forest's operational performance based on environmental protection (Pizzi et al., 2020). The concept of green accounting itself is part of environmental accounting, which states that environmental accounting has several policies. Green accounting can also be said to be a business concept which focuses on efficiency and effectiveness in the use of long-term resources in a customary forest's manufacturing process to integrate the customary forest's environmental functions and provide social benefits. As explained above, green accounting has been around for a long time and is not something new in the accounting system of companies in the world, but its implementation is still voluntary on the part of companies and is not an activity that companies are required to carry out by applicable laws and regulations. This causes a lack of accountability for green accounting because it is not required by law (Widiyati & Hasanah, 2022). The results of his research reveal that even though companies have participated in protecting the environment, green accounting has not been able to meet people's expectations. The latest research adds that the implementation of environmental accounting in Indonesia is apparently still not effective and there are still many companies that exist without caring about environmental impacts. that will result from the customary forest's activities (Kwilinski et al., 2023). The meaning of green accounting regarding reality and disclosure is an important thing in a customary forest but is often ignored by a customary forest. The application of green accounting is still ignored as proven by the results of his research, he found the fact that even though companies have disclosed green accounting, in fact the companies do not report the bad news they encounter, so reporting on environmental costs becomes ineffective.

Green Accounting defines green accounting as accounting that identifies, measures, assesses and discloses costs related to customary forest activities related to the environment. Green accounting is a type of environmental accounting that provides an overview of efforts to combine environmental benefits and costs into decision-making. Green accounting is the process of recognizing and measuring a value and then preparing it in a report related to environmental and financial data to be used to make economic and non-economic decisions (Klymenko et al., 2021). Companies will receive legislation from the public if the customary forest has implemented green accounting by applicable norms, values and beliefs. The concept of green accounting must be a commitment for entrepreneurs so that companies can be responsible for their environment. Several costs are indicators in implementing green accounting, including; environmental prevention costs, namely costs intended for customary forest activities to prevent the production of waste and/or rubbish that can cause environmental damage; environmental detection costs, namely costs for activities carried out in determining whether products, processes and other activities in the customary forest meet applicable environmental standards or vice versa; External environmental failure costs are costs for activities carried out after releasing waste or rubbish into the environment (Vărzaru, 2022). The external environmental failure costs can be divided into two categories, namely, realized external failure costs and unrealized categories. Environmental performance is the performance carried out by a customary forest in creating a good (green) environment.

4.7.2 The Relationship between Environmental Performance and Forest Sustainable Development Goals

Based on the results of SEM-PLS analysis, the p-value of 0.000 is smaller than 0.050, so it can be concluded that Environmental Performance has a positive and significant relationship with Forest Sustainable Development Goals. Environmental costs are costs incurred by the customary forest for the customary forest's environmental management activities. Based on the results of the tests that have been carried out, the environmental cost variable for sustainable development shows a probability value greater than the significance value. So, it can be concluded that environmental costs do not affect sustainable

development (Richnák & Fidlerová, 2022). This means that even though the customary forest has disclosed environmental costs in the customary forest's annual report, it is possible that the mining customary forest has not been able to achieve sustainable development. Because the environmental costs incurred by the customary forest are still insufficient, the customary forest considers that environmental costs only increase the customary forest's expenses. This research also shows that the environmental costs of mining are still low and are not in line with the amount of environmental damage caused by companies (Alakkas et al., 2023). Based on stakeholder theory, the stronger the bond between the customary forest and its stakeholders, the better the customary forest will be, and vice versa. By implementing environmental cost disclosure, the customary forest has indirectly carried out its responsibilities towards stakeholders. This research is in line with the research) that green accounting as measured by environmental costs does not affect customary forest sustainability. Because green accounting does not always have an impact on companies. However, this research is not in line with research showing that green accounting as measured by environmental costs affects sustainable development (Sariannidis et al.,2018). This means that implementing green accounting can increase economic growth, fight poverty, and change production and consumption in a balanced direction if you want to achieve sustainable development. This research is also not in line with research that the implementation of green accounting as measured by environmental costs has a positive influence on sustainable development. Identifying, measuring, presenting and disclosing indirect costs and benefits of customary forest activities that impact the environment and society is known as green accounting. Where this he encourages companies to do sectoral things for business interests and do environmentally friendly things. By implementing effective green accounting, companies will contribute to sustainable development or sustainable development, which will enable increased human welfare both now and in the future. The research results show that the application of green accounting has a positive impact on sustainable development (SDv). Therefore, green accounting contributes to sustainable development (Ionaşcu et al., 2022). The Influence of Implementing Environmental Performance on Sustainable Development. Companies can take environmental responsibility through environmental performance, which involves interacting with stakeholders and showing their attention to the environment during the production process. According to Bernarto et al. (2024) stakeholder theory, companies must consider the welfare of their stakeholders, because this has an impact on the sustainability of the customary forest's business. So, if a customary forest has good environmental performance, it will increase profitability and provide value to stakeholders. So, this will affect sustainable or sustainable development. Environmental performance has a significant influence on profitability. The better environmental performance of a customary forest will have a positive impact on sustainable and sustainable development.

4.7.3 The Relationship between Digital Green Accounting and Sustainable Development

Based on the results of the SEM-PLS analysis, the p-value of 0.000 is smaller than 0.050, so it can be concluded that Digital Green accounting has a positive and significant relationship with the Forest Sustainable Development Goals. By bringing and implementing green accounting into the customary forest, it helps the customary forest to continue to improve its performance in preserving the environment which ultimately helps the customary forest to improve customary forest performance. Apart from that, the public's doubts about the presence of companies that can damage and disrupt environmental sustainability can be dismissed by companies and replaced with full trust in the customary forest. Apart from increasing customary forest performance and building public trust in the customary forest's presence, it seems that green accounting also has an impact that is no less important, namely the existence of the customary forest itself (Khiong, 2022). All of this can happen because of the customary forest's trust and confidence in implementing green accounting which is a very good decision for the customary forest. After seeing many positive things that happened to companies in implementing green accounting, researchers concluded that companies interpret green accounting as one of the keys to improving performance, triggering the growth of public trust and a determining factor in the customary forest's existence to date. The customary forest's willingness to implement green accounting is a good action taken by the customary forest, so it is hoped that in the future the customary forest will continue to implement green accounting to maintain environmental sustainability and community welfare because the customary forest will also feel the benefits of all of this. The impact of implementing green accounting on society and the environment. Just the presence of companies in the community can raise the standard of living of local communities without disturbing the activities carried out by the community because the customary forest's presence in the community allows native people to get to know life outside and can make them grow and grow. don't just stay silent in the middle of the forest. Plus, the implementation of green accounting by companies is increasingly improving their standard of living. The customary forest provides assistance that is needed by the community to improve welfare (Perwitasari et al., 2020). The assistance provided includes educational, health, economic, environmental and infrastructure assistance by the customary forest's principles, namely prioritizing the five pillars in meeting the customary forest's sustainability standards. Apart from making people's lives prosperous, the customary forest also takes part in preserving the environment and nature. This is done by the customary forest to keep the industry running because the customary forest's main resources come entirely from natural products. So that leads researchers to a conclusion, namely that the implementation of green accounting carried out by companies has a positive impact on local communities. However, on the other hand, the good intentions of companies to improve the welfare of the community are not always well received by the local community (Sukthankar et al., 2022). It seems that there are individuals who still feel that the customary forest's presence has not had a good impact and has not been able to fully improve their welfare. If we conclude this statement without finding out the cause, this could have a negative value for the customary forest, where the customary forest is implementing green accounting and realizing it is not yet perfect. Therefore, researchers are continuing their research to find out the truth about what happened (Pizzi et al., 2020). The thing that triggers some local people to feel that the customary forest doesn't care about them is because of their high ego, where a sense of dissatisfaction

causes them to feel that way. Some elements of society demand that companies always fulfil whatever they want, this then makes the customary forest feel that the customary forest's principles of improving the welfare of society for the sake of sustainability have deviated from what it should do. This is a challenge that must be faced by companies so that the customary forest's presence in society remains accepted and is detrimental to various parties.

4.8 Managerial and Practical Implication

Green accounting involves measuring, monitoring, and reporting the environmental impacts of business activities. This includes aspects such as the use of natural resources, greenhouse gas emissions, waste and other environmental degradation. Thus, green accounting tries to take into account environmental costs that are often ignored in traditional accounting. The adoption of green accounting brings various benefits to companies. First of all, it allows companies to identify potential efficiencies in the use of natural resources and energy, which in turn can reduce production costs. Additionally, by taking environmental costs into account, companies can make wiser decisions in planning their business strategies, including investment in environmentally friendly technologies and reducing the environmental impact of their operations. Apart from that, green accounting can also improve a customary forest's image in the eyes of consumers who are increasingly concerned about environmental issues. Green accounting is the collection of production costs, inventory, waste costs, and performance for planning, development, evaluation, and control over business decisions. 22 Thus, it can be concluded that green accounting is an accounting system that reveals the collection of production costs, inventory, cost waste, planning, evaluation development, and control over business decisions regarding environmental problems faced. Green Accounting is applied by companies because it is to produce research on data in the form of figures about costs and their impact on the environment, then the use of environmental accounting concepts for companies to encourage the ability to minimize environmental problems faced by the customary forest. Environmental accounting or environmental accounting is combining information on environmental benefits and costs for various accounting practices and incorporating environmental costs into business decisions. Green Accounting is a concept where companies prioritize efficiency and effectiveness in the sustainable use of resources in their production processes to align customary forest development with environmental activities and create benefits for society. The application of green accounting is the beginning of a solution to existing environmental problems. The application of environmental accounting can encourage the ability to minimize the environmental problems faced. The aim of implementing this accounting is to increase the efficiency of environmental management by assessing environmental activities from an environmental and economic benefit perspective. Implementing green accounting, it is hoped that it can save the environment because in implementing green accounting, companies voluntarily follow guidelines from the government where the customary forest runs its business. Green accounting is a new accounting paradigm that explains that a customary forest's focus is not only on making profits but must also take into account environmental damage caused by customary forest activities by spending on environmental improvements. Environmental costs incurred by a customary forest are a liability because the customary forest profits from activities that cause environmental damage.

5. Conclusion

Based on the results of data analysis, it is concluded that digital green accounting has a positive and significant relationship to financial performance, environmental performance has a positive and significant relationship to sustainable development and digital green accounting has a positive and significant relationship to sustainable development. The impact felt by the customary forest regarding the implementation of green accounting carried out by the customary forest helps the customary forest to continue to improve its performance in preserving the environment which ultimately helps the customary forest to improve customary forest performance. Just the presence of a customary forest in the community can raise the standard of living of local communities without disturbing the activities carried out by the community because the customary forest's presence in the community allows native people to get to know life outside and can make them grow and not just stay silent in the middle of the forest. Plus, the implementation of green accounting by companies is increasingly improving their standard of living. Apart from making people's lives prosperous, the customary forest also takes part in preserving the environment and nature. This is done by the customary forest to keep the industry running because the customary forest's main resources come entirely from natural products. Some of the suggestions given by researchers based on the research results are that industrial players are expected to implement green. accounting and environmental performance to pay more attention to society, because a positive image from society helps the customary forest in increasing its customary forest profits by encouraging increased sales and then increasing customary forest profits. Investors are expected to be more careful in making investments, especially companies that have social legitimacy and are valued as environmentally friendly companies by the government and society so that the customary forest's reputation increases and adds to the customary forest's image. Green accounting is an important step towards a more sustainable business. By considering the environmental impact of business activities, companies can take steps to reduce their environmental footprint while improving their operational efficiency and brand image. Although there are still challenges that need to be overcome, more and more companies are realizing the importance of implementing green accounting in their business practices to ensure that they not only generate financial profits but also maintain environmental balance for future generations.

References

Abdelhalim, A. M., Ibrahim, N., & Alomair, M. (2023). The moderating role of digital environmental management accounting in the relationship between eco-efficiency and corporate sustainability. *Sustainability, 15*(9), 7052.

Alakkas, A. A., Shabir, S., Alhumoudi, H., Boukhris, M., Baig, A., & Khan, I. A. (2023). The Impact of Sustainability Accounting on Environmental Performance and Productivity: A Panel Data Analysis. *International Journal of Sustainable Development & Planning, 18*(8).

Al-Taani, A. H. M., Al-Zaqeba, M. A. A., Maabreh, H. M. A., & Jarah, B. A. F. (2024). Exploring the impact of digital accounting and digital zakat on improving business sustainability in the Middle East and Malaysia. *International Journal of Advanced and Applied Sciences, 11*(1), 56-67.

Amalya, W. R. (2023, April). *Check for updates The Relationship of Green Accounting on Financial Performance with Environmental Performance as a Mediation Variable Wulan Rezky Amalya (), Eko Ganis Sukoharsono, and Alphasyah Lazuardy Sidarta.* In Proceedings of the 2022 Brawijaya International Conference (BIC 2022) (Vol. 235, p. 5). Springer Nature.

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research. *Accounting, Auditing & Accountability Journal, 31*(1), 2-24.

Belyaeva, Z., & Lopatkova, Y. (2020). The impact of digitalization and sustainable development goals in SMEs' strategy: A multi-country European study. The Changing Role of SMEs in Global Business: Volume II: Contextual Evolution Across Markets, Disciplines and Sectors, 15-38.

Bernarto, I., Purwanto, A., Tulung, J. E., & Pramono, R. (2024). The Influence of Perceived Value, And Trust on WOM and Its Impact on Repurchase Intention. *Revista De Gestão Social E Ambiental, 18*(4), e04983-e04983.

Castro, C., & Lopes, C. (2022). Digital government and sustainable development. *Journal of the Knowledge Economy, 13*(2), 880-903.

Christ, K. L., Dijkstra-Silva, S., Burritt, R. L., & Schaltegger, S. (2024). Sustainability management accounting–enabling macro-level sustainability transformation towards the United Nations Sustainable Development Goals. *Meditari Accountancy Research, 32*(3), 923-944.

Dahi, H. N., & Abdullah, H. S. (2024). Application of Material Flow Cost Accounting Technology to Support Green Productivity and Its Reflection in Achieving Sustainable Development. *Journal of Information Systems Engineering and Management, 9*(1), 24815.

Di Vaio, A., & Varriale, L. (2020). SDGs and airport sustainable performance: Evidence from Italy on organisational, accounting and reporting practices through financial and non-financial disclosure. *Journal of Cleaner Production, 249*, 119431.

Dutta, T. K., Raju, V., & Kassim, R. N. M. (2019). Green Accounting in Achieving Higher Corporate Profitability and Sustainability in Ready Made Garment Industry in Bangladesh. A Conceptual Analysis. *Advanced Journal of Accounting and Finance, 1*(1), 1-9.

Feng, S., Chong, Y., Yu, H., Ye, X., & Li, G. (2022). Digital financial development and ecological footprint: Evidence from green-biased technology innovation and environmental inclusion. *Journal of Cleaner Production, 380*, 135069.

Indriastuti, M., & Mutamimah, M. (2023). Green Accounting and Sustainable Performance of Micro, Small, and Medium Enterprises: The Role of Financial Performance as Mediation. *The Indonesian Journal of Accounting Research, 26*(2), 249-272.

Ionașcu, I., Ionașcu, M., Nechita, E., Săcărin, M., & Minu, M. (2022). Digital transformation, financial performance and sustainability: Evidence for European Union listed companies. *Amfiteatru Economic, 24*(59), 94-109.

Kamaruddin, E., Salman, I., Annahidl, N., Munawiroh, M., Siswanto, H., Siregar, I., ... & Purwanto, P. (2024). Investigating the role of digital transformation and digital innovation on school performance. *International Journal of Data and Network Science, 8*(3), 1557-1566.

Khan, P. A., Johl, S. K., & Akhtar, S. (2022). Vinculum of sustainable development goal practices and firms' financial performance: A moderation role of green innovation. *Journal of Risk and Financial Management, 15*(3), 96.

Khiong, K. (2022). Entrepreneurship Teaching Culture and Entrepreneurship Education Factors : A Literature Review. *Journal of Industrial Engineering & Management Research, 3*(4), 279-286. https://doi.org/10.7777/jiemar.v3i4.409

Klymenko, O., Lillebrygfjeld Halse, L., & Jæger, B. (2021). The enabling role of digital technologies in sustainability accounting: Findings from Norwegian manufacturing companies. *Systems, 9*(2), 33.

Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). Environmental sustainability within attaining sustainable development goals: The role of digitalization and the transport sector. *Sustainability, 15*(14), 11282.

Peng, Y., Ahmad, S. F., Ahmad, A. Y. B., Al Shaikh, M. S., Daoud, M. K., & Alhamdi, F. M. H. (2023). Riding the waves of artificial intelligence in advancing accounting and its implications for sustainable development goals. *Sustainability, 15*(19), 14165.

Perwitasari, G., Saraswati, E., & Prihatiningtias, Y. W. (2020). Environmental accounting and sustainable development: a systematic literature. *International Journal of Innovating Science and Service Technology, 5*(11), 390-397.

Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review. *Journal of cleaner production, 276*, 124033.

Prayuda, R. Z. (2024). Investigation of the Influence of Price, Promotion and Innovation on Customer Satisfaction in the Digital Era. *UJoST- Universal Journal of Science and Technology, 3*(2), 13–18. https://doi.org/10.11111/ujost.v3i2.150

Purwanto, A., Purba, J., Bernarto, I., & Sijabat, R. (2023). Investigating the role digital transformation and human resource management on the performance of the universities. *International Journal of Data and Network Science, 7*(4), 2013-2028.

Rahman, M. M., & Islam, M. E. (2023). The impact of green accounting on environmental performance: mediating effects of energy efficiency. *Environmental Science and Pollution Research, 30*(26), 69431-69452.

Richnák, P., & Fidlerová, H. (2022). Impact and Potential of Sustainable Development Goals in Dimension of the Technological Revolution Industry 4.0 within the Analysis of Industrial Enterprises. *Energies, 15*(10), 3697.

Rosamartina, S., Giustina, S., & Angeloantonio, R. (2022). Digital reputation and firm performance: The moderating role of firm orientation towards sustainable development goals (SDGs). *Journal of Business Research, 152*, 315-325.

Sariannidis, N., Garefalakis, A., Ballas, P., & Grigoriou, E. (2018). Eco-efficiency, sustainable development and environmental accounting in the tourism industry during a crisis. Sustainable Development and Environmental Accounting in the Tourism Industry During A Crisis (November 15, 2018). *Corporate Board: Role, Duties & Composition, 14*(3).

Sukthankar Sitaram, V., Kumar Baral, S., Chandra Rath, R., & Goel, R. (2022). Application of digital technology in the accounting profession for achieving business goals and sustainable development. In Machine Intelligence and Data Science Applications: Proceedings of MIDAS 2021 (pp. 527-538). Singapore: Springer Nature Singapore.

Vărzaru, A. A. (2022). An empirical framework for assessment of the effects of digital technologies on sustainability accounting and reporting in the European union. *Electronics, 11*(22), 3812.

Widiyati, D., & Hasanah, N. (2022). The Influence of Social Capital, Collaborative Competence and Entrepreneurial Behavior to Sustainable Competitive Advantage. *Journal of Industrial Engineering & Management Research, 3*(1), 99 - 106. https://doi.org/10.7777/jiemar.v3i1.269

Xu, J., She, S., & Liu, W. (2022). Role of digitalization in environment, social and governance, and sustainability: Review-based study for implications. *Frontiers in Psychology, 13*, 961057.

Yang, W., Chen, Q., Guo, Q., & Huang, X. (2022). Towards sustainable development: How digitalization, technological innovation, and green economic development interact with each other. *International Journal of Environmental Research and Public Health, 19*(19), 12273.