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Abstract—The development of MSMEs in Denpasar City experiences significant growth every year. Economic profits from business activities are expected to result in improved living conditions globally, but can also lead to environmental damage and social inequality. Sustainable business is a business effort to minimize negative impacts on the environment and social so that future generations have adequate resources. Tri Hita Karana is local wisdom which aims to achieve happiness by prioritizing the principles of togetherness, harmony and balance between economic motives, environmental preservation, culture, aesthetics and spirituality. This research aims to determine the influence of Green Intellectual Capital and Green Innovations on the Sustainable Performance of MSMEs in Denpasar City with Tri Hita Karana as moderator. This research was carried out on MSMEs in Denpasar City, a sample of 100 people with a sampling technique using probability sampling. The data analysis technique used is the Partial Least Square (PLS) method. The results show that hypotheses 1 and 2 are accepted, namely that green intellectual capital and green innovation have a positive and significant relationship with sustainable performance. Tri Hita Karana does not have a significant effect on the relationship between green intellectual capital and sustainable performance and does not have a significant effect on the relationship between green innovation and sustainable performance, which means that hypotheses 3 and 4 are rejected.

Keywords: green innovation; green intelectual capital; sustainable performane; tri hita karana

Introduction

The MSME sector is a reliable industry indicator for economic stability at both local and regional levels. Ozaralli & Rivenburgh (2016) state that it is crucial to introduce entrepreneurship in both developed and developing countries. The rapid growth of MSMEs in Denpasar City contributes significantly to the economic development of the city, particularly in terms of the number of residents engaged as entrepreneurs.

Economic development should ideally run parallel with sustainable resource management and pollution reduction (Wang & Song, 2014). The goal of increasing productivity and efficiency often leads to environmental quality degradation. Many companies still neglect environmental aspects,

resulting in issues like excessive natural resource use and improper waste disposal, causing water, air, and soil pollution.

According to Haseeb et al. (2019), sustainable business performance is vital for

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success in a competitive environment. The 2014 Green Industry Report survey found that 55% of consumers from 60 countries are willing to pay more for products from environmentally conscious companies. The World Economic Forum states that investing in natural models will positively respond to the COVID-19 pandemic, potentially adding up to $101 trillion in annual business value and creating 395 million jobs by 2030. Villasalero (2017) highlights that knowledge is one of the most critical resources for companies. Knowledge is essential in companies, driven by employees to generate new product ideas, enhance product quality, and compete successfully in the market.

The relationship between green intellectual capital and sustainable performance has been empirically proven by Yusoff et al. (2019) in Malaysia, indicating high environmental awareness motivates SMEs to implement green strategies. Investing in Green Intellectual Capital (GIC) can enhance business sustainability. GIC can improve financial performance and transparency, strengthening the relationship between sustainability disclosure and financial (ROA) and non-financial performance (Chandra & Augustine, 2019). Marco-Lajara et al. (2022) also found a positive relationship between GIC and green performance. However, Saraswati et al. (2021) found that green intellectual capital (green human capital, green relational capital, and green structural capital) does not enhance sustainable business.

Resource-based theory (RBT) posits that high-quality resources and capabilities are the primary sources of sustainable competitive advantages (Hart, 1995). Yong et al. (2019) state that companies' intangible resources contribute more to achieving and sustaining superior performance when combined or integrated. Increasing environmental concerns make GIC essential for motivating employees to engage in environmental protection and sustainability thinking, fostering sustainable performance for business continuity (Roespinoedji et al., 2019). Effectively and efficiently managing GIC can create good sustainable performance for companies.

Rising environmental issues drive companies toward green innovation. Green innovation has become a popular concept due to global warming and environmental damage posing severe threats (Kunapatarawong & Martínez-Ros, 2016; Miao et al., 2017). Environmental innovation involves optimizing internal resources to produce eco-friendly products and new services through environmental needs and technology (Fernando et al., 2019). Green innovation not only promotes business sustainability but also helps companies use eco-friendly practices in production, requiring knowledgeable staff to develop, manage, implement, control, and monitor cost-saving initiatives for business benefits (Song et al., 2019; Song & Wang, 2018).

Empirical studies show a positive relationship between green innovation and sustainable performance, such as Putra & Utama's (2022) study on the prosthetic teeth industry. This aligns with Marco-Lajara et al. (2022) and Tonay & Murwaningsari's (2022) findings. However, Roespinoedji et al. (2019) found a negative relationship, stating green innovation reduces financial performance.

Tri Hita Karana, a local wisdom representing Bali's cultural identity, aims for happiness by prioritizing principles of harmony and balance between economic motives, environmental preservation, culture, aesthetics, and spirituality (Paulus Tahu et al., 2019). Implementing Parahyangan (harmony with God), Pawongan (harmony among people), and Palemahan (harmony with nature) can significantly contribute to business performance (Astawa et al., 2021). Business activities are influenced by internal and external environments, and harmony between management, employees, companies, and surrounding communities leads to beneficial business situations (Mulyadi et al., 2022).

Studies on Tri Hita Karana's relationship with organizational performance include Riana et al. (2011) and Bagus Ketut Surya et al. (2014). Putu et al. (2022) found Tri Hita Karana moderates the influence of competence on MSME performance, while Putu Yeni Ari Yastini et al. (2022) found it does not moderate the influence of funding decisions and LPD performance.

As Bali's capital, Denpasar should lead in addressing environmental issues, especially waste management. High urbanization in Denpasar, a hub for education, trade, and tourism, increases daily waste volume. Data from the Bali Provincial Environmental and Forestry Service (DLHK) shows Denpasar generates the most waste in Bali, producing 3,719 cubic meters daily in 2017 from a population of 880,600.

The development of MSMEs (Micro, Small, and Medium Enterprises) in Denpasar City experienced rapid growth in 2015 and 2016, evidenced by an increase of 175.52 percent, from 11,500 to 31,685 units. However, there was a decline due to the COVID-19 pandemic in 2019, but it has gradually begun to rise again since 2022. These businesses are classified into four types: trade, various services, agricultural industry, and non-agricultural industry.

Table 1. Number of MSMEs in Denpasar City (2015-2022)

No	Classifica-	2015	2016	2017	2018	2019	2020	2021	2022
1	Trade	8,050	10,456	10,615	10,734	11,036	11,126	10,506	10,616
2	Agricul-	993	16,305	16,746	16,762	17,013	17,078	15,798	15,818
3	Non-Agricul-ture	726	1,371	1,245	1,267	1,383	1,413	1,022	1,057
4	Various	2,136	2,629	2,234	2,455	2,594	2,609	2,223	2,258
	Jumlah	11,905	30,761	30,840	31,218	32,026	32,226	29,549	29,749

Source: Denpasar City Cooperatives and MSMEs Office, 2023

The increasingly fierce business competition and development require continuous human resource and innovation improvements. Current business challenges include environmental degradation from industrial activities. While MSMEs play a crucial role in driving the national economy, adopting green practices is essential. Consumer demands and regulatory policies drive the need for a balance between economic growth and environmental preservation. The MSME sector must consider the environmental impact of their products and industrial activities, ensuring sustainable resource use and waste management. Creating eco-friendly products and environmentally safe production processes is a significant challenge and necessity for MSMEs.

The competition and development in the business world are becoming increasingly intense and sharp, so improving business operations requires continuous human resource development and innovation. Currently, businesses face difficulties and concerns about future stability due to increased environmental damage caused by industrial activities. Although MSMEs play a crucial role in driving the national economy, adopting green practices is now an important consideration for companies. Consumer demands and regulatory policies are pushing for a more balanced approach between economic growth and environmental sustainability. The MSME sector is expected to pay attention to the products they produce and their industrial activities in exploiting natural resources and waste disposal as part of the production process to prevent environmental damage. The industry is encouraged to create more environmentally friendly products and production processes that do not harm the environment. This demand and necessity pose a significant challenge for MSMEs in conducting their business. To realize this, the Bali Provincial Government has issued Governor Regulation No. 97 of 2018 on Limiting the Generation of Single-Use Plastic Waste.

Concept And Hypothesis

Resource Based Theory

The Resource Theory discusses how companies can achieve competitive advantage by developing and analyzing their resources, emphasizing the superiority of knowledge or economies that rely on intangible assets. Resource Theory holds the perspective that high-quality resources and capabilities of a company are the primary sources of sustainable competitive advantages (Hart, 1995). Wernefelt's research in 1984 explained the Resource Theory, where companies achieve competitive advantage and good financial performance by owning, mastering, and utilizing strategic assets important to the company (Firmansyah, 2017).

Sustainable Performance

Istilah kinerja berkelanjutan (*sustainable* The term "sustainable performance" was first introduced in a report titled "The Limits of Growth," published in 1972. This study was later reproduced in the Brundtland Report in 1987 and further published by the World Commission on Environment and Development (WCED) in 1989 (Borim-De-Souza et al., 2015). The report defines sustainability as meeting current developmental needs without compromising the needs of future generations. Another contributor to this field is Elkington (1994), who introduced the triple bottom line (TBL), a framework related to sustainable performance consisting of the 3Ps: profit, people, and planet (Montabon, 2015). According to Savitz & Weber (2014), sustainable performance is about creating benefits for stakeholders, improving the lives of those who interact with it, and protecting the environment.

Green Intelectual Capital (GIC)

Intellectual capital is defined as the total overall reserve of knowledge, information, technology, intellectual property rights, experience, organizational learning and competence, team communication systems, customer relationships, and brands that create value for the company (Stewart, 1997). Intangible assets and intellectual capital are key to a company's knowledge for gaining a competitive advantage. Intellectual capital is useful information in a formalized package, acquired and generated to achieve higher company value, and can be distinguished between intellectual as an asset and intellectual capital as expertise (Cenciarelli et al., 2018). Green intellectual capital reflects the intangible assets owned by a company, including knowledge, wisdom, experience, and innovation in the area of environmental protection (Y. S. Chen, 2008).

Green Innovation (GI)

Innovation is defined as the discovery of something new for an individual or group of people, either as a discovery or an invention, to achieve a goal or solve a particular problem. According to Chang (2011), green innovation is a critical strategic catalyst for achieving sustainable development, including technological innovations involved in energy savings, pollution prevention, and waste recycling. Green innovation is also defined as all actions that can be taken by individuals or organizations to promote the development and implementation of improved processes, products, techniques, and management systems that contribute to reducing negative environmental impacts and achieving specific ecological goals. Green innovation implies that product innovation, process innovation, or model innovation leads companies to higher levels of environmental sustainability (Triguero et al., 2013).

Tri Hita Karana

Tri Hita Karana is commonly abbreviated as THK. The term THK is not found in the Vedas or other Hindu scriptures. This term is a result of the creativity of Hindu religious leaders, particularly in Bali, who managed to formulate various concepts within Hindu teachings (Dwirandra, 2011). The term THK first appeared on November 11, 1966, during the First Regional Conference of the Bali Hindu Community Struggle Organization held at Dwijendra Institute in Denpasar. This conference was based on the awareness of Hindus of

their dharma to participate in the nation's development towards a prosperous, just, and affluent society based on Pancasila. Subsequently, the term Tri Hita Karana spread and became widely known.

THK has the concept that harmonious relationships are essential in carrying out any activity or organization. This belief in harmony has guided the Balinese Hindu community to behave in ways that manifest in various tangible actions, namely (a) the harmony of the relationship between humans and Ida Sang Hyang Widhi Wasa (God Almighty), known as Parahyangan, (b) the harmony of relationships among humans, known as Pawongan, and (c) the harmony of the relationship between humans and the natural environment, known as Palemahan.

This research was conducted on MSME actors in Denpasar City, Bali. This location was chosen because Denpasar is the administrative center of Bali and reflects the economic conditions of the region. The city of Denpasar strongly supports the development of MSMEs through the Denpasar Festival, which involves local MSMEs. Based on the background and gaps in previous research, a research model was developed consisting of four hypotheses:

H1: Green Intellectual Capital has a positive and significant effect on the Sustainable Performance of MSMEs in Denpasar City.

H2: Green Innovation has a positive and significant effect on the Sustainable Performance of MSMEs in Denpasar City.

H3: Tri Hita Karana strengthens the influence of Green Intellectual Capital on the Sustainable Performance of MSMEs in Denpasar City.

H4: Tri Hita Karana strengthens the influence of Green Innovation on the Sustainable Performance of MSMEs in Denpasar City.

This research model examines Tri Hita Karana as a moderator of Green Intellectual Capital and Green Innovation on the Sustainable Performance of MSMEs in Denpasar City. The study uses several relevant and significant previous studies as comparative studies and additional references to complement the research results.

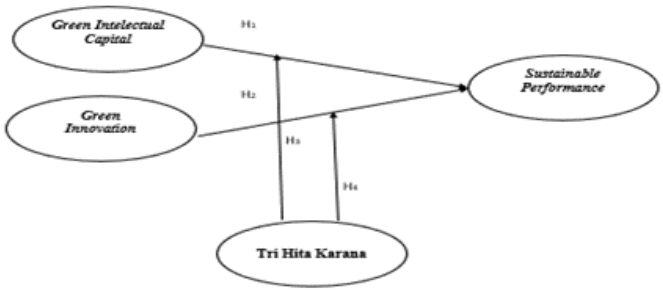

Figure 1. Research Conceptual Framework

Method

This research is a quantitative study using an associative approach. This study aims to examine the influence of the relationship between green intellectual capital and green innovation on the sustainable performance of MSMEs in Denpasar City, with Tri Hita Karana as a moderator. The population in this study comprises all MSMEs in Denpasar City in 2022, totaling 29,749. The sample size determination for this study is based on the Slovin method, resulting in 100 respondents. The sampling technique used in this study is purposive sampling. The criteria used are respondents who own MSMEs domiciled in Denpasar City, with each MSME represented by one owner.

The data collection methods in this study include literature review, interviews, and questionnaires. The questionnaires were distributed both online using Google Forms and

offline by providing hardcopy questionnaires. This research employs a closed questionnaire consisting of six sections: screening criteria, respondent profile, green intellectual capital, green innovation, sustainable performance, and Tri Hita Karana. The study consists of two independent variables, one dependent variable, and one moderating variable. There are 11 indicators in this study, which are broken down into 38 statements. The analysis technique used to address the research problems is the Partial Least Square (PLS) method, utilizing SmartPLS version 3 software.

Result and Discussion

This study aims to analyze the influence of green intellectual capital and green innovation on the sustainable performance of MSMEs in Denpasar City, with Tri Hita Karana as a moderator. A total of 100 respondents participated in filling out the research questionnaire. The characteristics of the respondents are depicted by presenting their demographics, including gender, age, and monthly turnover. The detailed characteristics of the respondents are presented in Table 2 below:

Based on gender, the respondents were predominantly female, with a percentage of 68%. The age of the respondents was mostly between 25 to 35 years old, with a percentage of 40%, followed by those aged 36 to 45 years, with a percentage of 20%. In terms of monthly turnover, the majority of respondents had a turnover of Rp. 0 to Rp. 300,000,000, with a percentage of 88%.

Table 2. Characteristics of Respondents

No.	Kriteria	Klasifikasi	Jumlah (orang)	Persentase
1	Gender	Male	32	32%
		Female	68	68%
		Total	100	100%
2	Age	17 to 24 years old	19	19%
		25 to 35 years old	40	40%
		36 to 45 years old	20	20%
		Above 46 years old	21	21%
		Total	100	100%
3	Annual revenue	0 to 300 million	88	88%
		above 300 juta to 2.5 billion	10	10%
		above 2.5 billion to 50 billion	2	2%
		Total	100	100%

Source: Data processed using SPSS version 16.00, 2023

Descriptive Statistical Analysis

Test Descriptive statistics are used to interpret the minimum, maximum, and mean values of Green Intellectual Capital and Green Innovation towards Sustainable Performance moderated by Tri Hita Karana. From the statistics obtained in this study, it can be explained that out of the 38 items of the instrument presented to 100 respondents, the results obtained are as table 3: Based on the data presented in Table 3 below on the Descriptive Statistical Test of Research on the variable Green Intellectual Capital (X1), it shows that the majority of respondents agreed with the questions regarding the Green Intellectual Capital variable as perceived by the respondents themselves, followed by the agreement responses which have a total average score of 3.901. This variable is measured using green human capital, green structural capital, and green relational capital with 9 statements. The dimension/component with the highest average value is green relational capital, amounting to 4.030. This is because green structural capital is one of the components of green intellectual capital that focuses on the interactive relationship between SME actors and

customers, suppliers, network members, and partners regarding environmental management.

Table 3. Descriptive Statistical Test of the Green Intellectual Capital Variable

Kode	Min	Max	Mean	Standard Deviation
X1.1	1	5	4,110	0,519
X1.2	1	5	3,900	0,542
X1.3	1	5	3,880	0,558
The average value of green human capital			3,963	
X1.4	1	5	3,840	0,578
X1.5	1	5	3,710	0,600
X1.6	1	5	3,580	0,599
The average value of green structural capital			3,710	
X1.7	1	5	4,090	0,582
X1.8	1	5	3,990	0,593
X1.9	1	5	4,010	0,551
The average value of green relational capital			4,030	
Total Average Value and Standard Deviation			3,901	0,569

Source: Data processed using SPSS version 16.00, 2023

Table 4. Descriptive Statistical Test of Green Innovation Variable

Kode	Min	Max	Mean	Standard Deviation
X2.1	2	5	3,810	0,544
X2.2	2	5	3,750	0,584
X2.3	1	5	3,500	0,585
X2.4	1	5	3,810	0,517
The average value of green process innovation			3,717	
X2.5	1	5	4,160	0,553
X2.6	1	5	4,070	0,558
X2.7	1	5	3,780	0,602
X2.8	1	5	3,790	0,592
The average value of green product innovation			3,950	
Total Average Value and Standard Deviation			3,834	0,567

Source: Data processed using SPSS version 16.00, 2023

Based on Table 4, it can be observed that the variable Green Innovation (X2) indicates that the majority of respondents agreed with the questions regarding the Green Innovation variable as perceived by the respondents themselves, followed by the agreement responses which have a total average score of 3.834. This variable is measured using green process innovation and green product innovation with a total of 8 statement items. The dimension/ component with the highest average value is green product innovation, amounting to 3.950. This is because green product innovation is one of the components of green innovation that focuses on innovative ideas leading to product design and marketing activities of an environmentally friendly SME product.

Table 5. Descriptive Statistical Test of Tri Hita Karana Variable

Kode	Min	Max	Mean	Standard Deviation
M1	1	5	4,540	0,559
M2	1	5	4,570	0,531
The average value of parahyangan			4,555	
M3	1	5	4,410	0,556
M4	1	5	4,450	0,576
The average value of pawongan			4,430	
M5	1	5	4,510	0,585
M6	1	5	4,340	0,540
The average value of palemahan			4,425	
Total Average Value and Standard Deviation			4,470	0,558

Source: Data processed using SPSS version 16.00, 2023

Berdasarkan tabel 5 dapat diketahui variabel Tri Based on Table 5, it can be observed that the variable Tri Hita Karana (M) indicates that the majority of respondents agreed with the questions regarding the Tri Hita Karana variable as perceived by the respondents themselves, followed by the responses that were quite agreeable with a total average score of 4.470. This variable is measured using parahyangan, pawongan, and palemahan with a total of 6 statement items. The dimension/component with the highest average value is parahyangan, amounting to 4.555. This is because parahyangan is one of the components of Tri Hita Karana that focuses on the balanced relationship between humans and the Almighty.

Table 6. Descriptive Statistical Test of *Sustainable Performace Variable*

Kode	Min	Max	Mean	Standard Deviation
Y1	1	5	3,300	1,063
Y2	1	5	3,600	0,644
Y3	2	5	3,710	0,531
Y4	1	5	3,730	1,000
The average value of the economic aspect			3,585	
Y5	2	5	4,090	0,492
Y6	1	5	4,060	0,536
Y7	1	5	3,950	0,559
Y8	1	5	3,970	0,496
Y9	1	5	4,170	0,501
The average value of the social aspect			4,048	
Y10	1	5	4,350	0,532
Y11	2	5	4,060	0,479
Y12	2	5	4,060	0,459
Y13	1	5	3,810	0,595
Y14	1	5	4,080	0,467
Y15	1	5	3,840	0,570
The average value of the environmental aspect			4,063	
Total Average Value and Standard Deviation			3,919	0,595

Source: Data processed using SPSS version 16.00, 2023

Based on Table 6, it can be observed that the Descriptive Test of the Sustainable Performance variable (Y) indicates that the majority of respondents agreed with the questions regarding the Sustainable Performance variable as perceived by the respondents themselves,

followed by responses that were quite agreeable with a total average score of 3.919. This variable is measured using economic aspects, social aspects, and environmental aspects with a total of 15 statement items. The dimension/component with the highest average value is the environmental aspect, amounting to 4.063. This is because the environmental aspect is one of the components of sustainable performance that focuses on the use of natural resources, environmental policies, pollution, and emissions.

Validity Test

Validity testing is conducted with the Outer Model Convergent Validity Testing of each construct indicator. Below are the outer loading values for each construct indicator as shown in Table 7.

Table 7. Validity Testing Results

Variable	Item Code	Outer Loadings	Result
Tri Hita Karana	M1	0,812	Valid
	M2	0,830	Valid
	M3	0,835	Valid
	M4	0,879	Valid
	M5	0,866	Valid
	M6	0,861	Valid
Green Intelectual Capital	X1.1	0,747	Valid
	X1.2	0,778	Valid
	X1.3	0,723	Valid
	X1.4	0,713	Valid
	X1.5	0,755	Valid
	X1.6	0,788	Valid
	X1.7	0,779	Valid
	X1.8	0,847	Valid
	X1.9	0,698	Valid
Green Innovation	X2.1	0,665	Valid
	X2.2	0,714	Valid
	X2.3	0,728	Valid
	X2.4	0,680	Valid
	X2.5	0,520	Tidak Valid
	X2.6	0,571	Tidak Valid
	X2.7	0,782	Valid
	X2.8	0,791	Valid
Sustainable Performance	Y1	0,671	Valid
	Y10	0,631	Valid
	Y11	0,702	Valid
	Y12	0,783	Valid
	Y13	0,719	Valid
	Y14	0,464	Tidak Valid
	Y15	0,633	Valid
	Y2	0,667	Valid
	Y3	0,662	Valid
	Y4	0,480	Tidak Valid
	Y5	0,746	Valid
	Y6	0,725	Valid
	Y7	0,832	Valid
	Y8	0,742	Valid
	Y9	0,675	Valid

Source: Data processed using SPSS version 16.00, 2023

Based on Table 7, some indicators have outer loadings < 0.6. An indicator is considered to be valid if its value is greater than 0.6, while if there are outer loadings below 0.6, they will be removed from the model. There are four indicators with outer loadings < 0.6, namely X2.5, X2.6, Y4, and Y14, so they will be removed from the model. Here is the latest Convergent Validity after removing the four indicators X2.5, X2.6, Y4, and Y14.

Table 8. Validity Testing Results after Indicator Removal

Variable	Item Code	Outer Loadings	Result
Tri Hita Karana	M1	0,813	Valid
	M2	0,830	Valid
	M3	0,834	Valid
	M4	0,880	Valid
	M5	0,867	Valid
	M6	0,859	Valid
Green Intelectual Capital	X1.1	0,746	Valid
	X1.2	0,777	Valid
	X1.3	0,718	Valid
	X1.4	0,708	Valid
	X1.5	0,755	Valid
	X1.6	0,786	Valid
	X1.7	0,782	Valid
	X1.8	0,851	Valid
	X1.9	0,701	Valid
Green Innovation	X2.1	0,710	Valid
	X2.2	0,780	Valid
	X2.3	0,792	Valid
	X2.4	0,688	Valid
	X2.7	0,766	Valid
	X2.8	0,778	Valid
Sustainable Performance	Y1	0,666	Valid
	Y10	0,646	Valid
	Y11	0,710	Valid
	Y12	0,791	Valid
	Y13	0,723	Valid
	Y15	0,623	Valid
	Y2	0,664	Valid
	Y3	0,632	Valid
	Y5	0,751	Valid
	Y6	0,753	Valid
	Y7	0,850	Valid
	Y8	0,750	Valid
	Y9	0,679	Valid

Source: Data processed using SPSS version 16.00, 2023

Convergent validity is also tested using the Average Variance Extract (AVE) value with a minimum value of 0.5 (Ghozali, 2020). Based on Table 9, it can be stated that each variable has met the convergence validity requirements with AVE values exceeding 0. The results of convergent validity show that the AVE value of each variable is greater than 0.5, thus meeting the convergence validity requirements. The variable with the highest AVE value is Tri Hita Karana, which is 0.718.

Table 9. Validity Testing of *Avarage Variance Extracted* (AVE)

Variable	Average Variance Extracted (AVE)	Result
Tri Hita Karana (M)	0,718	Valid
Green Intelectual Capital (X1)	0,577	Valid
Green Innovation (X2)	0,567	Valid
Sustainable Performance (Y)	0,509	Valid

Source: Data processed using SPSS version 16.00, 2023

Reliability Test

According to Ghozali (2020), composite reliability testing aims to assess the reliability of instruments in a research model. If all latent variable values have composite reliability > 0.7 and Cronbach's alpha > 0.7, it means that the constructs have good reliability or the questionnaire used as a tool in this research is reliable or consistent. Based on Table 10, it can be seen that all variables in this research model are reliable because composite reliability and Cronbach's alpha > 0.7.

Tabel 10. Validity Testing of Composite Reliability dan Cronbach's Alpha

Variable	Cronbach's Alpha	Composite Reliability
Tri Hita Karana (M)	0,923	0,948
Green Intelectual Capital (X1)	0,909	0,922
Green Innovation (X2)	0,847	0,856
Sustainable Performance (Y)	0,919	0,923

Source: Data processed using SPSS version 16.00, 2023

Inner Model Evaluation

The coefficient of determination or R-square value is used to determine the level of variation in changes in a specific independent latent variable towards the dependent latent variable, indicating whether it has a substantive influence. R2 results of 0.67, 0.33, and 0.19 for endogenous latent variables in the structural model indicate that the model is "strong", "moderate", and "weak" (Ghozali, 2020). Based on Table 11, the R2 value for Sustainable Performance is 0.586, which means it falls into the strong category. Therefore, it can be concluded that Green Intellectual Capital and Green Innovation have a significant impact on Sustainable Performance.

Table 11. R Square Value

	R Square	R Square Adjusted
Sustainable Performance (Y)	0.586	0.563

Source: Data processed using SPSS version 16.00, 2023

Effect Size (f2) values are also used to evaluate whether removing exogenous variables has a substantive impact on endogenous variables. Effect Size (f2) values of 0.02, 0.15, and 0.35 can be interpreted as indicating whether predictor latent variables have small, medium, and large effects on the structural level according to Ghozali (2020). Table 12 shows the Effect Size (f2) values of each exogenous variable on the endogenous variable. It can be concluded that Tri Hita Karana has an Effect Size value of 0.009, indicating that all of them have a small influence on Sustainable Performance. Meanwhile, Green Innovation and Green Intellectual Capital each have Effect Size values of 0.204 and 0.154, respectively, indicating that they all have a medium influence on Sustainable Performance.

Table 12. Effect Size Value (F2)

	Sustainable Performance (Y)
Tri Hita Karana (M)	0,009
Green Innovation (X2)	0,204
Green Intelectual Capital (X1)	0,154

Source: Data processed using SPSS version 16.00, 2023

Hypothesis Testing

Hypothesis testing in research uses the t-statistic coefficient. The results/output of the bootstrapping command produces t-statistic values. An indicator with a t-statistic > 1.96 is considered significant (Ghozali, 2020). An indicator can also be considered influential if it

has a p-value < 0.05.

Table 13. Hypothesis test

	Original Sample (O)	T Statistics (|O/ STDEV|)	P Values
Green Innovation (X2) -> Sustainable Performance (Y)	0,399	3,914	0,000
Green Intelectual Capital (X1) -> Sustainable Performance (Y)	0,416	3,370	0,001
Green Intelectual Capital (X1)*Budaya Tri Hita Karana (M) -> Sustainable Performance (Y)	0,081	0,470	0,639
Green Innovation (X2) *Budaya Tri Hita Karana (M) -> Sustainable Performance (Y)	-0,173	1,079	0,281

Source: Data processed using SPSS version 16.00, 2023

Based on Table 13, the hypothesis testing results for direct effects are as follows:

Hypothesis testing for the effect of Green Intellectual Capital on Sustainable Performance has a t-statistic value of 3.370 > 1.96, p-value of 0.001 < 0.05, and an original sample of 0.416, therefore H1 is accepted.

Hypothesis testing for the effect of Green Innovation on Sustainable Performance has a t-statistic value of 3.914 > 1.96, a p-value of 0.000 < 0.05, and an original sample of 0.399, therefore H2 is accepted.

Hypothesis testing for the effect of Green Intellectual Capital on Sustainable Performance moderated by Tri Hita Karana has a t-statistic value of 0.470 < 1.96, p-value of 0.639 > 0.05, and an original sample of 0.081, therefore H3 is rejected.

Hypothesis testing for the effect of Green Innovation on Sustainable Performance moderated by Tri Hita Karana has a t-statistic value of 1.079 < 1.96, p-value of 0.281 > 0.05, and an original sample of -0.173, therefore H4 is rejected.

The Influence of Green Intellectual Capital on the Sustainable Performance of MSMEs

Based on the calculation results of Green Intellectual Capital on Sustainable Performance, the t-statistic value is 3.370 > 1.96, the p-value is 0.001 < 0.05, and the original sample is 0.416, thus the alternative hypothesis (H1) is accepted. This means that Green Intellectual Capital has a positive and significant effect on Sustainable Performance. In other words, any change in the value of Green Intellectual Capital has a direct effect on the change in Sustainable Performance. For example, if Green Intellectual Capital increases, there will be an increase in the Sustainable Performance of MSMEs in Denpasar City, and statistically, this effect is significant.

The findings of this research contribute significantly by highlighting the importance of Green Intellectual Capital as an intangible resource for generating competitive advantages. Other studies, such as those by Yong et al., (2019), Yusoff et al., (2019), and Marco-Lajara et al., (2022), also found consistent results, indicating a positive and significant relationship between Green Intellectual Capital and Sustainable Performance in various contexts.

The Resource Based Theory (RBT) suggests that intangible resources of companies tend to contribute to achieving and sustaining superior company performance when they are combined or integrated effectively. Therefore, effective management of Green Intellectual Capital can lead to good Sustainable Performance for the company.

In addition to theoretical benefits, the implications of this study are practical. The conceptual model proposed in this research can serve as a guide for MSMEs in Denpasar City, particularly to enhance their Sustainable Performance, improve their ability to produce environmentally friendly products, achieve cleaner production outcomes, and utilize Green Intellectual Capital as a strategy to sustain their current business model. Environmentally based

business strategies can create new business opportunities for organizations to achieve sustainability and open doors for collaboration.

The implementation of Green Intellectual Capital will enable MSMEs to develop environmentally friendly products, including the use of recycled materials, renewable energy, and waste reduction. MSMEs actors are required to provide sufficient training to their employees, particularly in environmental protection. Proper investment in building good information systems to protect their Green Intellectual Capital is also necessary. Additionally, MSME actors should establish sustainability performance goals as part of their organizational reward system. Employees will be more motivated to engage in environmental protection and sustainable thinking when they receive rewards. Furthermore, the competency levels of employees in environmental protection should be evaluated for organizational task effectiveness.

The Influence of Green Innovation on the Sustainable Performance of MSMEs

Based on the calculation results, Green Innovation has a t-statistic value of 3.914 > 1.96, a p-value of 0.000 < 0.05, and an original sample of 0.99, thus the alternative hypothesis (H2) is accepted. This indicates that Green Innovation has a positive and significant effect on Sustainable Performance. In other words, any change in the value of Green Innovation has a direct effect on the change in Sustainable Performance. For instance, if Green Innovation increases, there will be an increase in Sustainable Performance, and statistically, this effect is significant.

Businesses aiming for better product quality must continuously innovate to improve environmental quality and sustainable business performance. Green innovation is conceptualized as green activities optimizing internal resources to enable companies to produce environmentally friendly products and new services through environmental needs and technology (Fernando et al., 2019). The research findings are in line with Mubeen et al. (2023), indicating that green innovation is a significant contributor to enhancing sustainable performance in MSMEs, as studied in MSMEs in Pakistan. This provides a deep understanding for MSME practitioners to realize the importance of environmentally friendly innovation in business strategies to enhance sustainable performance. Nawaser et al. (2023) explained that the verification results of green innovation, both directly and indirectly, affect sustainable performance in the chemical industry, in a study involving 293 small and medium-sized enterprises in the chemical products sector in Eshtehard Industrial City, Iran. Research conducted by Tantayanubutr (2017) examined the impact of green innovation on the sustainable performance of Thailand's food industry implementing green industry initiatives in line with the national Green Industry Project. The research findings confirmed the positive relationship between the influence of green innovation and sustainable performance. Green innovation has a positive and significant effect on sustainable performance, according to a study in the hospitality industry in Malaysia (Asadi et al., 2020).

Business owners are required to pay more attention to the environment to achieve business sustainability, including in the MSME sector. Green innovation can help MSMEs develop more efficient production processes and reduce resource consumption such as energy and water. This can increase productivity and reduce operational costs. With green innovation, MSMEs can create more environmentally friendly products or services. The implementation of green innovation can help MSMEs comply with increasingly stringent environmental regulations and standards. Green innovation can contribute to reducing negative impacts on the environment and the surrounding community. This can increase engagement and support from the local community. By adopting green innovation, MSMEs can reduce risks related to regulatory changes, environmental crises, or other environmental issues. MSME actors can optimize their sustainable performance and play a greater role in achieving sustainable development goals. It is important to note that the success of green innovation requires long-term commitment and strong integration into MSMEs' business strategies.

The Influence of Tri Hita Karana on Moderating the Relationship between Green Intellectual Capital and Sustainable Performance of MSMEs

Based on the calculation results, the moderation of Tri Hita Karana on the relationship between Green Intellectual Capital and Sustainable Performance has a t-statistic value of 0.470 < 1.96, a p-value of 0.639 > 0.05, and an original sample of 0.081, thus the hypothesis H3 is rejected. This means that Tri Hita Karana does not have a significant effect on moderating the relationship between Green Intellectual Capital and Sustainable Performance. In other words, any change in the value of Tri Hita Karana does not influence the relationship between Green Intellectual Capital and Sustainable Performance. For example, if Tri Hita Karana increases, there will be no significant increase in the relationship between Green Intellectual Capital and Sustainable Performance.

Tri Hita Karana is a philosophical concept that emphasizes the balance and harmony among three main elements in human life: the relationship between humans and God, the relationship between humans and other humans, and the relationship between humans and nature or the environment. The results of this study did not find evidence that Tri Hita Karana can moderate the influence of Green Intellectual Capital on Sustainable Performance. However, this does not mean that MSME actors should ignore the implementation of Tri Hita Karana in their business processes. Many MSME actors have unconsciously implemented Tri Hita Karana in managing their businesses. If this concept continues to be developed with sustained capabilities, it will create motivation for conducting sustainable business practices.

The Influence of Tri Hita Karana on Moderating the Relationship between Green Innovation and Sustainable Performance of MSMEs

Based on the calculation results, the moderation of Tri Hita Karana on the relationship between Green Innovation and Sustainable Performance has a t-statistic value of 1.079 < 1.96, a p-value of 0.281 > 0.05, and an original sample of -0.173, thus hypothesis H4 is rejected. This means that Tri Hita Karana does not have a significant effect on moderating the relationship between Green Innovation and Sustainable Performance. In other words, any change in the value of Tri Hita Karana does not influence the relationship between Green Innovation and Sustainable Performance. For example, if Tri Hita Karana increases, there will be no significant increase, and it tends to be in the opposite direction, in the relationship between Green Innovation and Sustainable Performance of MSMEs in Denpasar City.

Tri Hita Karana is a local wisdom that has become the cultural identity of the Balinese community in various sectors. The purpose of Tri Hita Karana is to achieve happiness by prioritizing the principles of togetherness, harmony, and balance between economic motives, environmental preservation, aesthetic culture, and spirituality (Paulus Tahu et al., 2019). These values underlie the behavior of entrepreneurs and the business world in improving their performance. The results of this study did not find evidence that Tri Hita Karana can moderate the influence of green innovation on sustainable performance. However, this does not mean that MSME actors should ignore the implementation of Tri Hita Karana in their business processes. Many MSME actors have unconsciously implemented Tri Hita Karana in managing their businesses. If this concept continues to be developed with sustained capabilities, it will create motivation for conducting sustainable business practices.

Conclusion

The analysis results prove that hypotheses 1 and 2 are accepted, namely that Green Intellectual Capital and Green Innovation have a positive and significant effect on the Sustainable Performance of MSMEs in Denpasar City. Meanwhile, hypotheses 3 and 4 are rejected. This indicates that Tri Hita Karana does not influence the relationship between Green Intellectual Capital and Green Innovation on the Sustainable Performance of MSMEs.

This research also provides theoretical contributions related to the Natural Resource

Based View (NRBV) and the Intellectual Capital Based View (ICBV). Competitive advantage and competitive strategies in the coming years will be rooted in organizational capabilities that facilitate economic environmental sustainability.

Practical implications include the hope that MSME actors can use the research results to make decisions related to sustainable performance. Green intellectual capital and green innovation, which are intangible resources, can generate competitive advantages. If companies can manage green intellectual capital and green innovation effectively and efficiently, they can create sustainable performance for the company. Environmental business strategies can open up new business opportunities for organizations to achieve sustainability and foster collaboration. Therefore, organizations must pay more attention to aspects of green intellectual capital and green innovation. MSME actors are advised to provide sufficient training to their employees, especially in environmental protection. MSME actors also need to invest properly in establishing good information systems to protect green intellectual capital.

For future researchers, involving similar sectors and using larger samples may draw stronger conclusions. The manufacturing sector on a larger scale could be considered for further research, not just MSMEs. Such research may enrich existing knowledge about the impact of green intellectual capital, green innovation, and sustainable performance globally. Additionally, conducting longitudinal studies to investigate changes in the variables over time would be interesting. This is believed to help researchers with a broader perspective to identify any improvements in the role of green innovation and sustainable performance dimensions. Furthermore, adding other variables to provide a broader understanding of the perspectives of factors that most influence the dependent variable would be beneficial.

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