



ISSN: 2617-6548

URL: [www.ijirss.com](http://www.ijirss.com)



## The effect of green organizational culture and green intellectual capital on green competitive advantage through green human resource management: Residential sector

 Athoillah Hikam<sup>1\*</sup>,  Ronny Malavia Mardani<sup>2</sup>,  Nurhidayah<sup>3</sup>

<sup>1,2,3</sup>Universitas Islam Malang, Malang, Indonesia.

Corresponding author: Athoillah Hikam (Email: [laksinfhikam@gmail.com](mailto:laksinfhikam@gmail.com))

### Abstract

This study aims to determine the effect of Green Organizational Culture and Green Intellectual on Green Competitive Advantage through Green Human Resource Management at The Taman Dayu", Green Eleven Residential. Using quantitative methods, data were collected from 170 employees of PT Ciputra Development Tbk's "The Taman Dayu" and Green Eleven Residential properties. The SEM-PLS analysis revealed significant direct effects, with GOC ( $\beta=0.302$ ,  $t=4.180$ ,  $p<0.001$ ) and GIC ( $\beta=0.369$ ,  $t=5.625$ ,  $p<0.001$ ) both positively impacting GCA. GHRM showed a substantial direct effect on GCA ( $\beta=0.282$ ,  $t=4.485$ ,  $p<0.001$ ) and served as a significant mediator, with GIC's indirect effect through GHRM being  $\beta=0.130$  ( $t=3.574$ ,  $p<0.001$ ) and GOC's indirect effect being  $\beta=0.103$  ( $t=3.150$ ,  $p=0.002$ ). The model explained 64.8% of GCA variance ( $R^2=0.648$ ) and 51.2% of GHRM variance ( $R^2=0.512$ ), demonstrating moderate predictive power. These findings highlight that GHRM can mediate the relationship between GIC and GCA directly; on the other hand, Green Human Resource Management (GHRM) can mediate the relationship between Green Organizational Culture (GOC) and Green Competitive Advantage (GCA) effectively. To create a Green Competitive Advantage, organizations need to integrate GHRM with broader and long-term green strategies. Human resource management of environmentally oriented companies must result in the organization's ability to absorb knowledge from the organization's dynamic external environment to be combined with existing knowledge and form new knowledge so as to create new knowledge.

**Keywords:** Green competitive advantage (GCA), Green human resource management (GHRM), Green intellectual capital (GIC), Green organizational culture (GOC).

**DOI:** 10.53894/ijirss.v8i3.6672

**Funding:** This study received no specific financial support.

**History: Received:** 19 March 2025 / **Revised:** 21 April 2025 / **Accepted:** 23 April 2025 / **Published:** 2 May 2025

**Copyright:** © 2025 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Publisher:** Innovative Research Publishing

## **1. Introduction**

Environmental issues in recent decades have become serious problems and require more attention. Environmental problems are closely related to industrial development, and over time, they have a significant impact on environmental damage. Therefore, there is a need for human awareness of the environment at global, national, and regional levels [1]. As technology becomes more sophisticated, it requires industries in Indonesia to keep up. In 2021, the Ministry of Industry explained its support for the creation of an environmentally friendly and competitive industry in the global arena through the implementation of Green Industry.

Green Industry is an industrial production process that prioritizes the effective and efficient use of resources in the production process in a sustainable manner in line with the Making Indonesia 4.0 program. In addition, it aims to reduce and emit waste in converting raw materials into products, and convert waste into more useful products [2]. Currently, Green Industry practices or better known as Green Business, have developed into functional areas, one of which is green human resource management [3]. GHRM is the practice of promoting environmental care behavior and data sources in a sustainable manner [4].

The current Green trend requires organizations to have the ability to compete with excellence in competition. This ability is known as the concept of Green Competitive Advantage. GCA is a company's ability obtained through its resources and characteristics to have higher performance supported compared to companies that have the same market or industry [5]. The achievement of this Green Competitive Advantage has made many companies change policies on both product processes and outputs produced with the aim of ensuring a sustainable environment. So, it is necessary to undergo a cultural transformation process in order to react to environmental problems, namely through Green Organization Culture [6].

Green Organizational Culture can provide assistance in achieving green industry strategies to be implemented successfully and provide a very important role for companies that implement Green Business [7]. The existence of Green Organizational Culture helps companies understand environmental strategies, through activities and policies, in providing environmental conservation results, where the company's goal of Competitive Advantage is achieved. In addition, the existence of GOC provides orientation in building a public image that has its own characteristics, so that green industry innovation is a fundamental value of the organization and its involvement in environmental issues [8].

Apart from GOC, in developing and providing opportunities for an organization or company to increase competitive advantage, namely through Green Intellectual Capital. GIC is environmentally oriented intellectual capital, and effective investment [9]. Another point of view, explaining that Green Intellectual can build awareness of a company on the environment so as to provide product innovations related to the environment [10].

There are several companies that implement Green Business and adopt GHRM in the property sector in Pasuruan Regency, such as PT Ciputra Development Tbk, through its businesses, namely "The Taman Dayu" and Green Eleven Residential. The area caters to its residents with a collaborative concept of modern lifestyle and atmosphere, featuring a ratio of 40% buildings and 60% green land. Ciputra Group has built an excellent reputation for quality property development in Indonesia for decades, including the development of The Taman Dayu. Along with the development, The Taman Dayu has become an independent area that is also equipped with a business and trade center known as Pandaan Central Business District. The Pandaan CBD area contains shopping buildings, culinary centers, and public areas equipped with entertainment facilities for families [11]. Meanwhile, Green Eleven Residential carries the concept of "Living Comfortably in Fresh Nature." Every residence built reflects Green Eleven's great attention to public facilities, security, comfort, sustainable environment, and high building quality [12].

This study aims to determine the effect of Green Organizational Culture and Green Intellectual Capital on Green Competitive Advantage through Green Human Resource Management at The Taman Dayu, Green Eleven Residential. Research on Green Competitive Advantage has not found much investigation. Therefore, this represents a novelty in research, as case studies on Green Industry or Green Business have not been identified.

## **2. Literature Review**

### *2.1. Green Organizational Culture*

Green Organizational Culture is a system of beliefs, values, ideas, principles and attitudes that shape organizational commitment and behavior related to protection [13]. Meanwhile, GOC includes shared values, norms, symbols and social stereotypes about organizational environmental management and shapes the standard behavior expected of individuals [14]. The symbolism of environmental management and protection in an environmentally friendly culture shapes the perceptions and behavior of organizational members. In addition, this culture can be interpreted as a transformation of the organization and its processes to become more environmentally friendly, which increases the efficiency of using the latest resources, reduces pollution and carries out activities in a sustainable manner, which is often referred to as greening [15]. Green organizational culture or GOC can be described as a current climate ideology based on science, politics and aesthetics that promotes sustainable economic and ecological development [16].

### *2.2. Green Intellectual Capital*

Intellectual capital is an intangible asset in a company, including knowledge, employee capabilities, technology, experience, and the ability to implement innovations so that company goals are achieved [17]. In addition, Intellectual Capital is important because it has the influence of fixed assets and financial sets has decreased compared to the influence of intangible assets [18]. Green Intellectual Capital can be defined as the total of all intangible assets owned by the company, knowledge, abilities and relationships associated with legal protection both at the individual level and at the organizational level of a company [19]. GIC is an intangible asset in the form of information resources, innovation and knowledge that

serves to increase the ability to compete while protecting the environment, which can improve sustainable performance [20].

### 2.3. Green Human Resource Management

Human Resource Management (HRM) or commonly called Human Resources (HR) is some of policies and practices needed by someone who runs the aspects of people or recruitment, screening, training, compensation, and renewal [21]. Green Human Resource Management is a combination of corporate environmental management with human resource management practices. GHRM not only helps in improving environmental performance but also provides more performance to the organization's finances [22]. Green HRM can be seen as a whole and integrated HR activity and is involved in the development, implementation and ongoing maintenance of a system, ensuring that employees of an organization can perform effectively [23]. The goal of GHRM is to make employees of the organization green for the benefit of individuals, society, the environment and business [24].

### 2.4. Green Competitive Advantage

Green Competitive Advantage is a condition in which companies occupy various positions related to environmental management or green innovation, peers cannot imitate environmental strategies that companies can obtain sustainable benefits from a successful environment [25]. In addition, GCA, as a scenario held by the company in managing the environment and its green innovation, cannot be imitated or copied by competitors, and consequently provides sustainable benefits for the company. If an organization has a green culture that is fully integrated into its system, then the company can achieve superior green performance [26]. A company is called sustainable when it tries to make a minimum negative impact on the environment and social and ensures that future generations can meet their basic needs to live longer with sufficient resources [27]. As a result, the following hypotheses are proposed:

*Hypothesis 1: Green Human Resource Management has a positive effect on Green Competitive Advantage.*

*Hypothesis 2: Green Intellectual Capital has a positive effect on Green Competitive Advantage.*

*Hypothesis 3: Green Intellectual Capital has a positive effect on Green Human Resources Management.*

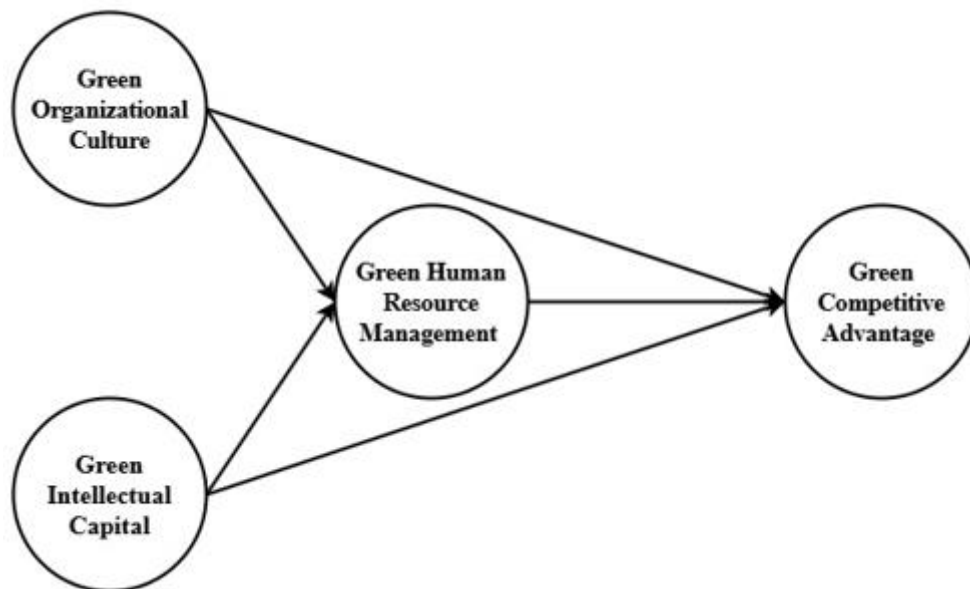
*Hypothesis 4: Green Organizational Culture has a positive effect on Green Human Resource Management.*

*Hypothesis 5: Green Organizational Culture has a positive effect on Green Human Resource Management.*

*Hypothesis 6: Green Human Resource Management as a mediator between Green Intellectual Capital and Green Competitive Advantage.*

*Hypothesis 7: Green Human Resource Management as a mediator between Green Organizational Culture and Green Competitive Advantage.*

The study's hypothesized model is depicted in Figure 1:



**Figure 1.**  
The conceptual framework of the study.

### 3. Research Method

The type of research used in this study is quantitative to examine the influence between green organizational culture and green intellectual capital on green competitive advantage through green human resource management PT. Ciputra Development Tbk, through its businesses, namely “The Taman Dayu”, Green Eleven Residential using a total sampling technique. The total sample in this study amounted to 170 employees. In measuring responses from respondents, the researchers used a 5-point Likert scale. The data analysis technique employed in this study utilizes Structural Equation Modeling - Partial Least Square (SEM-PLS) using SmartPLS4 data processing tools.

## 4. Research Results and Discussion

### 4.1. Outer Model

Convergent validity is used to evaluate indicators representing the underlying latent variable. The concept of convergent validity is used to evaluate the relationship between target points (components) and construct points. To establish convergent validity, the correlation between variables and constructs must be appropriate, indicators are considered adequate if the value of outer loading is between 0.5 - 0.6 [28]. The following is a test of the outer model.

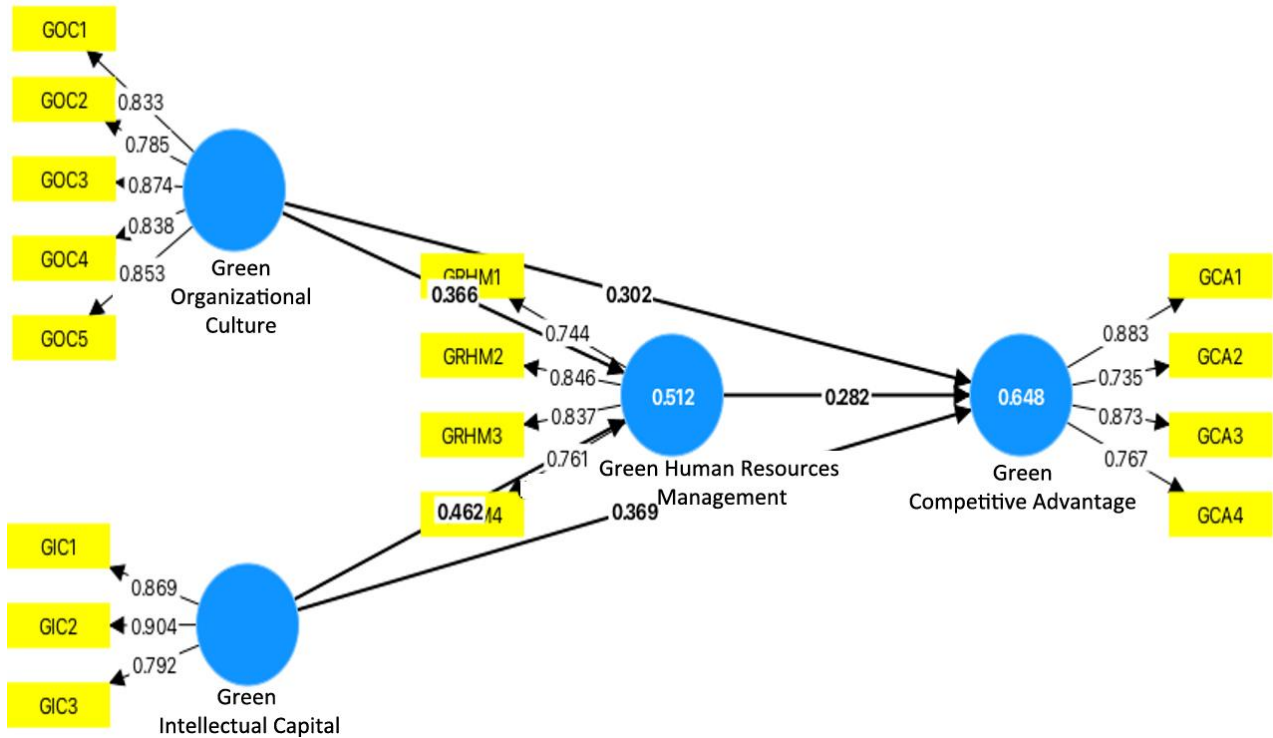


Figure 2. Initial Measurement Model.

Figure 2 shows that all indicators have a loading factor value above 0.6, which meets the requirements of convergent validity, so it can be concluded that the measurement model above provides good validity and reliability. In addition, the value of outer loading on all variables is exploratory, which is still acceptable.

### 4.2. Structural Model Test Analysis (Inner Model)

The next step is testing the structural model (inner model). In this test, the coefficient of determination ( $R^2$ ) is carried out with the aim of measuring the extent to which endogenous variables can be explained by endogenous variables. The higher the coefficient of determination, the better the resulting predictive value.

Table 1. Coefficient of Determination.

	R Square	R Square Adjusted
GCA	0.648	0.642
GRHM	0.512	0.506

In Table 1, it can be concluded that the R-Square value, that Green Organizational Culture and Green Intellectual Capital are able to explain Green Competitive Advantage 0.648, which means that the research model carried out is moderate. While the Green Human Resources Management variable in the table shows that the R-Square value is 0.512, which means it is moderate.

**Table 2.**  
Hypothesized Results of Path Coefficient.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
GHRM -> GCA	0.282	0.288	0.063	4.485	0.000
GIC -> GCA	0.369	0.362	0.066	5.625	0.000
GIC -> GHRM	0.462	0.467	0.060	7.731	0.000
GOC -> GCA	0.302	0.305	0.072	4.180	0.000
GOC -> GHRM	0.366	0.362	0.064	5.750	0.000

**Table 3.**  
Hypothesis Results from Path Coefficient.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
GIC -> GHRM -> GCA	0.130	0.135	0.036	3.574	0.000
GOC -> GHRM -> GCA	0.103	0.105	0.033	3.150	0.002

Hypothesis testing is carried out to see the independent variable (X) has an impact on the dependent variable (Y) which is moderated by the moderating variable (Z), from this test it is seen from the  $\rightarrow$ P-Value, if the P-Value  $< 0.5$  then it can be stated that there is an influence between these variables. Based on the table that has been displayed, it can be explained that:

1. The PLS measurement results of the Green Organizational Culture variable on Green Human Resources Management show that it has a positive and significant effect, because the T-Statistic is more than 1.960 and the P-Value is 0.000.
2. The results of PLS measurements of the Green Intellectual Capital variable on Green Human Resources Management show that it has a positive and significant effect, because the T-Statistic is more than 1.960 and the P-Value is 0.000.
3. The PLS measurement results of the Green Organizational Culture variable on Green Competitive Advantage show that it has a positive and significant effect, because the T-Statistic is more than 1.960 and the P-Value is 0.000.
4. The PLS measurement results of the Green Intellectual Capital variable on Green Competitive Advantage show that it has a positive and significant effect, because the T-Statistic is more than 1.960 and the P-Value is 0.000.
5. The results of PLS measurements of the Green Human Resources Management variable on Green Competitive Advantage show that it has a positive and significant effect, because the T-Statistic is more than 1.960 and the P-Value is 0.000.
6. The PLS measurement results of the Green Intellectual Capital variable on Green Competitive Advantage, with the Green Human Resources Management variable as mediation, found that the T-Statistic value is 3.574, which is more than 1.960, and the P-Value is 0.000, which is less than 0.05. Thus, it can be concluded that the Green Intellectual Capital variable on Green Competitive Advantage, with the Green Human Resources Management variable as mediation, has an effect.
7. The PLS measurement results of the Green Organizational Culture variable on Green Competitive Advantage with the Green Human Resources Management variable as mediation, it was found that the T-Statistic value was 0.595 which was smaller than 1.960 and a P-Value of 0.02 which was less than 0.05. Thus, it can be concluded that the Green Organization Culture variable on Green Competitive Advantage with the Green Human Resources Management variable as the mediating variable has effect.

### 4.3. Discussion

#### 4.3.1. Green Human Resource Management has a positive and significant effect on Green Competitive Advantage

From the hypothesis testing that has been done, it shows that there is a significant relationship between Green Human Resource Management and Green Competitive Advantage. The research results are in line with research from [29].

GHRM involves recruiting, training, and retaining employees with the necessary competencies and attitudes towards sustainability [30]. GHCM is essential for organizations to implement and maintain environmentally friendly practices [30]. Organizations can enhance their ability to absorb and implement green practices by implementing GHRM strategies. This can lead to the development of skills and capabilities necessary for continuous performance improvement [31]. GHRM practices play an important role in gaining a competitive advantage [32]. It is emphasized that such practices help organizations acquire valuable and unique resources necessary for sustainable competitive advantage [32]. Organizations can cultivate a workforce that is concerned and dedicated to the environment by implementing GHCM practices. This can increase their potential to achieve competitive advantage and sustainability. Investing in GHCM practices has the potential to generate competitive advantage for the Company.

Dynamic Capabilities points out that success in gaining competitive advantage depends on a company's ability to adapt quickly to changes in the market and external environment [33]. In this case, although Green Human Resource Management can develop green capabilities at the individual and team level, companies need to ensure that broader business policies and strategies also support green practices to achieve Green Competitive Advantage.

Green Resource Management practices influence organizational performance by transforming employees into extraordinarily important resources and unique resources. The utilization of such resources in business development means that organizational goals can be better supported, which in turn leads to a sustainable competitive advantage [34]. To this day, these three companies are still able to survive without changing their business strategies that are specific to protecting the environment, one of which is because these companies have green HRM as a control tool to keep their business environmentally friendly without reducing or reducing profits.

#### *4.3.2. Green Intellectual Capital has a positive and significant effect on Green Competitive Advantage*

From the hypothesis testing that has been done, it shows that there is a significant relationship between Green Intellectual Capital and Green Competitive Advantage. The results of the study are in line with research [17, 29].

RBV is the creation of a competitive advantage that cannot be separated from the company's ability to manage its resources, namely resources that are valuable, rare, difficult to imitate, and can be managed properly by the company [35]. Intellectual Capital based on RBV is the core of creating competitive advantage [36]. The characteristics of company resources referred to in the RBV. First, the resources owned by the company can help the company to be able to provide better needs and services to consumers than competitors. Second, the resources owned are limited in number and difficult to imitate. Third, the resources owned by the company are profitable, and the last is that the resources are durable.

Tangible assets related to the creation of competitive advantage are very easy to know and measure the extent of their influence, but this is not the case with intangible assets, such as company resources. These assets are invisible but their existence can be utilized and provide benefits to the company [35]. The resource approach assumes that if any of the organization's resources and competencies make it possible to use opportunities or neutralize threats, are accessible to a small number of organizations and are difficult to imitate, they can serve as a source of competitive advantage. The management of a company's intangible assets can help the company gain a competitive advantage [37].

These companies are also considered to be able and capable of developing environmentally friendly housing by making innovations, as well as by maintaining good relationships with customers, partners, and suppliers about protecting the environment. It can be said that the company has the knowledge, employee capabilities, experience, and ability to implement innovations to achieve organizational goals and has had a positive impact on the company's ability to survive to this day.

#### *4.3.3. Green Intellectual Capital Has a Positive and Significant Effect on Green Human Resources Management*

From the hypothesis testing that has been done, it shows that there is a significant relationship between Green Intellectual Capital and Green Human Resources Management. An organization shows involvement in every environmental issue and consistent application of values, depending on the goals regarding sustainability as a key factor in organizational development and excellence. Researchers conducted research on GIC to study and promote sustainability in an organization. IC was introduced as a discipline of economics [3]. Huang and Kung argue that GIC has made a difference in an organization that has chosen to focus on sustainability, so the GIC concept offers an opportunity to embrace the environment in all organizational management [17].

An organization shows involvement in every environmental issue as well as consistent application of values, depending on the goals regarding sustainability as a key factor in organizational development and excellence. The researcher conducted research on GIC to study and promote sustainability in an organization. IC was introduced as a discipline of economics [3].

The results of this study are in accordance with research conducted [29]. In accordance with the Resource-Based View (RBV) theory, in which GIC is seen as a unique resource that provides a competitive advantage for an organization, this is because GIC can increase the organization's capability to create added value based on sustainability. However, the RBV theory is less specific in explaining how the relationship between Green Intellectual Capital and Green Human Resources Management, so the ICV (Intellectual Capital-Based View) theory is considered more capable of explaining the relationship between Green Intellectual Capital and Green Human Resources Management.

#### *4.3.4. Green Organizational Culture has a positive and significant effect on Green Human Resource Management*

The hypothesis testing that has been carried out shows that there is a significant relationship between Green Organizational Culture and Green Competitive Advantage. The results of the study are in line with research [16, 38]. In accordance with the Resource-Based View (RBV) theory, where Green Organizational Culture is seen as a unique resource that provides a competitive advantage for an organization, this is because Green Organizational Culture can increase the organization's capability in creating added value based on sustainability. This RBV theory shows that Green Organizational Culture has an important role in Green Competitive Advantage because it acts as a driver of performance in an organization and future wealth. This RBV theory emphasizes that the use of tangible and intangible resources must be efficient in order to create a competitive advantage in an organization.

Corporate culture plays an important role in organizations towards environmentally friendly innovation practices. If the "corporate culture" continues to encourage green practices and mentoring to remain critical in creating new ideas, it encourages the company to increase value and help achieve goals [38]. Sustainable business is a socially and environmentally conscious strategy and practice that leads to a healthier world and paves the way for increasing company profits [39]. Competitive profits include industry-leading actions that help a company outperform its competitors [40].

GOC can be a source of competitive advantage because GOC must have different characteristics from its competitors' cultures and, as an intangible asset, must be difficult for competitors to imitate. In other words, a strong GOC helps employees understand the company's environmental strategy. Thus, employees can know whether GOC is part of the company's core values. Through various activities and policies, companies can generate environmental sustainability values, which will then

produce competitive advantages [41]. Such GOC strategies can help differentiate a company's competitive advantage from highly environmentally friendly values in the minds of consumers [42]. In addition, enhancing a green organizational culture can help companies build a more distinctive image in the eyes of the public [43]. Companies can add and develop environmental values to minimize negative effects that affect the environment through organizational culture to maintain competitive advantages in environmental aspects. The better the environmentally friendly culture implemented by the Company, the more positive benefits it can have on the company so that it can make the Company superior compared to its competitors.

#### *4.3.5. Green Organizational Culture has a positive and significant effect on Green Human Resource Management*

The hypothesis testing that has been carried out, it shows that there is a significant relationship between Green Organizational Culture and Green Human Resource Management. The results of the study are in line with research [44, 45]. Green Human Resource Management is defined as a human resource practice that focuses on environmental sustainability through the creation of "green" employees, who can recognize and appreciate the organization's environmental initiatives. It concentrates on "green" selection and recruitment, "green" training and development, "green" performance management and appraisal, and "green" payment and reward systems that expand the organization's human resources [46].

In accordance with the Resource-Based View (RBV) theory, where Green Organizational Culture is seen as a unique resource that provides a competitive advantage for an organization, this is because Green Organizational Culture as an intangible asset owned by the company, can increase the organization's capabilities in creating added value based on sustainability. In this RBV theory, it shows that Green Organizational Culture has an important role in Green Human Resource Management because it acts as a driver of performance in an organization and the creation of wealth in the future. This RBV theory emphasizes that the utilization of tangible and intangible resources must be efficient in order to create a competitive advantage in an organization.

In addition, organizational conditions are important motivators for practicing pro-environmental activities such as Green Human Resource Management by organizations [47] if an organization values green activities by going beyond the goal of just making a profit, and looking for ways to minimize negative impacts and maximize positive impacts of its activities on the environment, then the organization creates a culture that supports Green Human Resource Management and its related practices. Therefore, the environmental culture of the organization, by building an environment that highly values green activities, encourages green recruitment, training, assessment, and incentives, which are dimensions of Green Human Resource Management [48].

Green Organizational Culture can have a significant positive influence on Green Human Resource Management by creating an environment that supports sustainability, increasing employee engagement and motivation, and strengthening commitment to environmentally friendly practices. By implementing this culture, companies not only create a positive impact on the environment but also increase job satisfaction, productivity, and employee retention. As a result, companies become more competitive in achieving sustainability goals and can optimize the use of human resources who have the knowledge and skills to support green change.

#### *4.3.6. Green Human Resource Management as a mediator between Green Intellectual Capital and Green Competitive Advantage*

From the hypothesis testing that has been done, it shows that Green Human Resource Management can mediate the relationship between Green Intellectual Capital and Green Competitive Advantage. The research results are in line with research from A'yuni and Muafi [29].

The role of GHRM as a control tool in an organization is indispensable for implementing strategies to achieve organizational goals. Employees with comprehensive knowledge and insight into the company's goals and objectives can help organizations proceed fairly with the implemented strategies, achieve their goals, and distinguish themselves in the competition. In short, the role of human management in implementing the organization's environmental strategy is very important. The results of the analysis show that GHRM plays a mediating role. In fact, practices such as training and development, reward systems, and written assessments can enhance and maintain employees' understanding and concern for environmental sustainability to achieve an environmentally friendly business. This means that the higher the environmental intellectual capital in the company, the better the management of the HR sector in the company that safeguards the environment, providing a higher competitive advantage.

#### *4.3.7. Green Human Resource Management as a mediator between Green Organizational Culture and Green Competitive Advantage*

From the hypothesis testing that has been done, it shows that Green Human Resource Management can mediate the relationship between Green Organizational Culture and Green Competitive Advantage. The results of the study are not in line with research [45].

Green Human Resource Management (GHRM) can effectively mediate the relationship between Green Organizational Culture (GOC) and Green Competitive Advantage (GCA). RBV theory explains that companies that have a green culture as a unique resource will be more difficult for competitors to imitate, thus creating a long-term competitive advantage. To create Green Competitive Advantage, organizations need to integrate GHRM with a broader, long-term green strategy and ensure that sustainability values are reflected in every aspect of organizational culture and operations, without relying entirely on GHRM as a mediator between GOC and GCA.

## 5. Conclusion

Research using data taken from 170 respondents or employees from The Taman Dayu, Green Eleven Residential, which are property companies that exist in Pasuruan Regency, shows that GHRM can mediate the relationship between GIC and GCA directly. On the other hand, Green Human Resource Management (GHRM) can mediate the relationship between Green Organizational Culture (GOC) and Green Competitive Advantage (GCA) effectively. To create a Green Competitive Advantage, organizations need to integrate GHRM with broader and long-term green strategies. The human resource management of environmentally oriented companies must result in the organization's ability to absorb knowledge from the organization's dynamic external environment to be combined with existing knowledge and form new knowledge, thereby creating new knowledge. In addition to environmentally-based Human Resource Management, Green Intellectual Capital (GIC) can potentially be an important asset for companies in achieving Green Competitive Advantage (GCA). The role of employees in a company is vital, as employees who are more skilled and aware of environmental issues can create greater changes in the organization towards sustainability. Environmentally friendly behavior in a company can be built with an environmentally friendly culture implemented by the company; it can positively benefit Green Human Resource Management by creating an environment that supports sustainability, increases employee engagement and motivation, and strengthens commitment to environmentally friendly practices, which can then cause the company to excel compared to its competitors.

## References

- [1] A. Arif, "Legal analysis of forest destruction (deforestation) and forest degradation on the environment," *Jurisprudentie: Jurusan Ilmu Hukum Fakultas Syariah dan Hukum*, vol. 3, no. 1, pp. 33-41, 2016. <https://doi.org/10.24252/jurisprudentie.v3i1.3622>
- [2] Ministry of Industry, *From GRC implementation to Bali commitment*. Jakarta: Inspectorate General of the Ministry of Industry, 2022.
- [3] J. Y. Yong, M. Y. Yuliza, F. Olawole, and R. T., "Nexus between green intellectual capital and green human resource management," *Journal of Cleaner Production*, vol. 231, pp. 364-374, 2019. <https://doi.org/10.1016/j.jclepro.2019.05.048>
- [4] I. Ahmad and W. A. Umrani, "The impact of ethical leadership style on job satisfaction: Mediating role of perception of Green HRM and psychological safety," *Leadership & Organization Development Journal*, vol. 40, no. 5, pp. 534-547, 2019. <https://doi.org/10.1108/LODJ-03-2019-0157>
- [5] B. J. Ali and G. Anwar, "An empirical study of employees' motivation and its influence on job satisfaction," *International Journal of Engineering, Business and Management*, vol. 5, no. 2, pp. 21-30, 2021.
- [6] Y. M. Yusoff, M. Nejadi, D. M. H. Kee, and A. Amran, "Linking green human resource management practices to environmental performance in hotel industry," *Global Business Review*, vol. 21, no. 3, pp. 663-680, 2020. <https://doi.org/10.1177/0972150919876702>
- [7] W. Song and H. Yu, "Green innovation strategy and green innovation: The roles of green creativity and green organizational identity," *Corporate Social Responsibility and Environmental Management*, vol. 25, no. 2, pp. 135-150, 2018. <https://doi:10.1002/csr.1445>
- [8] C.-H. Wang, "How organizational green culture influences green performance and competitive advantage: The mediating role of green innovation," *Journal of Manufacturing Technology Management*, vol. 30, no. 4, pp. 666-683, 2019. <https://doi.org/10.1108/JMTM-03-2018-0127>
- [9] Y. M. Yusoff, M. K. Omar, and M. D. K. Zaman, "Practice of green intellectual capital. Evidence from Malaysian manufacturing sector," IOP Conference Series: Materials Science and Engineering (Vol. 469, No. 1, p. 012008). IOP Publishing.
- [10] A. Firmansyah, "The influence of green intellectual capital and organizational identity and their impact on green competitive advantage," *Substansi: Sumber Artikel Akuntansi Auditing dan Keuangan Vokasi*, vol. 1, no. 1, pp. 183-219, 2017.
- [11] The Taman Dayu, "About the Taman Dayu," Retrieved: <https://thetamandayu.com/about-us/>, 2024.
- [12] Perumahan Green Eleven, "About us," Retrieved: <https://perumahangreeneleven.com/tentang-kami>, 2024.
- [13] E. Afum, Y. Agyabeng-Mensah, and J. A. Owusu, "Translating environmental management practices into improved environmental performance via green organizational culture: Insight from Ghanaian manufacturing SMEs," *Journal of Supply Chain Management Systems*, vol. 9, no. 1, pp. 31-49, 2020.
- [14] L. C. Milenxi and E. Murwaningsari, "Factors affecting integrated reporting," *JPEKA: Jurnal Pendidikan Ekonomi, Manajemen Dan Keuangan*, vol. 7, no. 1, pp. 19-33, 2023. <https://doi.org/10.26740/jpeka.v7n1.p19-33>
- [15] W. A. Umrani, R. Mahmood, and U. Ahmed, "Unveiling the direct effect of corporate entrepreneurship's dimensions on the business performance: A case of big five banks in Pakistan," *Studies in Business and Economics*, vol. 11, no. 1, pp. 181-195, 2016.
- [16] J. J. García-Machado and D. Martínez-Ávila, "Green culture and environmental commitment in Spanish SMEs: The moderating effect of geographic location," *Environmental Science and Pollution Research*, vol. 26, no. 25, pp. 25908-25918, 2019. <https://doi.org/10.1007/s11356-019-05413-9>
- [17] C. L. Huang and F. H. Kung, "Environmental consciousness and intellectual capital management: Evidence for Taiwan's manufacturing industry," *Management Decision*, vol. 49, no. 9, pp. 1405-1425, 2011. <https://doi.org/10.1108/00251741111173916>
- [18] L. M. Gogan, A. Artene, I. Sarca, and A. Draghici, "The impact of intellectual capital on organizational performance," *Procedia-social and Behavioral Sciences*, vol. 221, pp. 194-202, 2016. <https://doi.org/10.1016/j.sbspro.2016.05.106>
- [19] Y.-S. Chen, "The positive effect of green intellectual capital on competitive advantages of firms," *Journal of Business Ethics*, vol. 77, pp. 271-286, 2008. <https://doi.org/10.1007/s10551-006-9306-9>
- [20] M. Y. Yusliza, J. Y. Yong, M. I. Tanveer, T. Ramayah, J. N. Faezah, and Z. Muhammad, "A structural model of the impact of green intellectual capital on sustainable performance," *Journal of Cleaner Production*, vol. 249, p. 119334, 2020. <https://doi.org/10.1016/j.jclepro.2019.119334>
- [21] M. Astuti and H. C. Wahyuni, "Strategy for implementing green human resource management in micro, small, and medium enterprises," *Matrik: Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, vol. 12, no. 2, pp. 121-128, 2018.



- [22] F. Fahim, N. R. Khan, A. Ahmad, and A. Ali, "Green human resource management and firm's environmental performance: Mediating role of employee commitment, green involvement and eco-friendly behaviour," *Paradigms*, vol. 13, no. 2, pp. 18-25, 2019. <https://doi.org/10.24312/1969130203>
- [23] S. Sudin and Z. M. Saad, "Linking green HRM and green intellectual capital with corporate environmental citizenship behavior," *European Proceedings of Social and Behavioural Sciences*, vol. 44, 2018. <https://doi.org/10.15405/epsbs.2018.07.02.45>
- [24] S. Jirawuttinunt, "The relationship between green human resource management and green intellectual capital of certified ISO 14000 businesses in Thailand," *St. Theresa Journal of Humanities and Social Sciences*, vol. 4, no. 1, pp. 20-37, 2018.
- [25] Y.-S. Chen and C.-H. Chang, "The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity," *Journal of Business Ethics*, vol. 116, pp. 107-119, 2013. <https://doi.org/10.1007/s10551-012-1452-x>
- [26] P. K. Muisyo, S. Qin, T. H. Ho, and M. M. Julius, "The effect of green HRM practices on green competitive advantage of manufacturing firms," *Journal of Manufacturing Technology Management*, vol. 33, no. 1, pp. 22-40, 2022.
- [27] D. Widiyati and E. Murwaningsari, "Achieving green competitive advantage through organizational green culture, business analytics and collaborative competence: The mediating effect of eco-innovation," *International Journal of Social and Management Studies*, vol. 2, no. 4, pp. 98-113, 2021. <https://doi.org/10.5555/ijosmas.v2i4.57>
- [28] I. Ghozali, *SEM alternative method using Partial Least Squares (PLS)*. Semarang: Diponegoro University Publishing Agency, 2014.
- [29] A'yuni and Muafi, "The influence of green intellectual capital on competitive advantage mediated by green human resource management," *Jurnal Bisnis: Teori dan Implementasi*, vol. 11, no. 2, pp. 81–92, 2020.
- [30] M. A. M. Maaz, R. Ahmad, and A. Abad, "Antecedents and consequences of green supply chain management practices: A study of Indian food processing industry," *Benchmarking: An International Journal*, vol. 29, no. 7, pp. 2045-2073, 2022. <https://doi.org/10.1108/BIJ-01-2021-0026>
- [31] T. C. Soares, R. S. Birch, J. Schneider, and J. B. S. O. d. A. Guerra, "Green absorptive capacity, green dynamic capabilities and green service innovation: A study in Brazilian universities," *International Journal of Sustainability in Higher Education*, vol. 24, no. 4, pp. 859-876, 2023.
- [32] S. Y. Malik, Y. Cao, Y. H. Mughal, G. M. Kundi, M. H. Mughal, and T. Ramayah, "Pathways towards sustainability in organizations: Empirical evidence on the role of green human resource management practices and green intellectual capital," *Sustainability*, vol. 12, no. 8, p. 3228, 2020. <https://doi.org/10.3390/su12083228>
- [33] D. J. Teece, "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance," *Strategic Management Journal*, vol. 28, no. 13, pp. 1319-1350, 2007. <https://doi.org/10.1002/smj.640>
- [34] A. A. Zaid, A. A. Jaaron, and A. T. Bon, "The impact of green human resource management and green supply chain management practices on sustainable performance: An empirical study," *Journal of Cleaner Production*, vol. 204, pp. 965-979, 2018. <https://doi.org/10.1016/j.jclepro.2018.08.091>
- [35] J. Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99-120, 1991. <https://doi.org/10.1177/014920639101700109>
- [36] U. Kalsum, "The influence of green intellectual capital and corporate environmental ethics on green competitive advantage (Study of Sharia Banks in Bima)," Master's Thesis, Syarif Hidayatullah State Islamic University, Jakarta, Indonesia, 2023.
- [37] I. Ulum, R. Rizqiyah, and A. W. Jati, "Intellectual capital performance: A comparative study between financial and non-financial industry of Indonesian biggest companies," *International Journal of Economics and Financial Issues*, vol. 6, no. 4, pp. 1436–1439, 2016.
- [38] M. T. Küçükoğlu, "The mediating role of green organizational culture between sustainability and green Innovation: A research in Turkish companies," *Business & Management Studies: An International Journal*, vol. 6, no. 1, pp. 64-85, 2018. <https://doi.org/10.15295/bmij.v6i1.208>
- [39] A. L. Larson, "Sustainable innovation through an entrepreneurship lens," *Business Strategy and the Environment*, vol. 9, no. 5, pp. 304-317, 2000.
- [40] M. E. Porter and C. v. d. Linde, "Toward a new conception of the environment-competitiveness relationship," *Journal of Economic Perspectives*, vol. 9, no. 4, pp. 97-118, 1995. <https://doi.org/10.1257/jep.9.4.97>
- [41] G. Qi, S. Zeng, X. Li, and C. Tam, "Role of internalization process in defining the relationship between ISO 14001 certification and corporate environmental performance," *Corporate Social Responsibility and Environmental Management*, vol. 19, no. 3, pp. 129-140, 2012. <https://doi.org/10.1002/csr.1284>
- [42] J. A. Aragón-Correa and S. Sharma, "A contingent resource-based view of proactive corporate environmental strategy," *The Academy of Management Review*, vol. 28, no. 1, pp. 71-88, 2003. <https://doi.org/10.2307/30040690>
- [43] L. C. Leonidou, P. Christodoulides, L. P. Kyrgidou, and D. Palihawadana, "Internal drivers and performance consequences of small firm green business strategy: The moderating role of external forces," *Journal of Business Ethics*, vol. 140, pp. 585-606, 2017. <https://doi.org/10.1007/s10551-015-2670-9>
- [44] D. T. Hastuti and M. Muafi, "The influence of organizational environmental culture on employee performance mediated by green human resource management (GHRM) and job satisfaction," *International Journal of Business Ecosystem & Strategy (2687-2293)*, vol. 4, no. 1, pp. 24-36, 2022.
- [45] A. Pangarso, R. Setyorini, T. Umbara, and H. Latan, *Green organizational culture and competitive advantage in Indonesian higher education: The mediation roles of green human capital management and absorptive capacity* (Green human resource management: A view from global south countries). Cham: Springer, 2024.
- [46] A. Shafaei, M. Nejati, and Y. M. Yusoff, "Green human resource management: A two-study investigation of antecedents and outcomes," *International Journal of Manpower*, vol. 41, no. 7, pp. 1041-1060, 2020. <https://doi.org/10.1108/IJM-08-2019-0406>
- [47] S. Ren, G. Tang, and S. E. Jackson, "Green human resource management research in emergence: A review and future directions," *Asia Pacific Journal of Management*, vol. 35, pp. 769-803, 2018. <https://doi.org/10.1007/s10490-017-9532-1>
- [48] M. Yeşiltaş, M. Gürlek, and G. Kenar, "Organizational green culture and green employee behavior: Differences between green and non-green hotels," *Journal of Cleaner Production*, vol. 343, p. 131051, 2022. <https://doi.org/10.1016/j.jclepro.2022.131051>

Informed Consent Statement



**UNIVERSITAS ISLAM MALANG  
(UNISMA)  
PROGRAM PASCASARJANA  
TERAKREDITASI**

Program Studi Magister :

- 1. Pendidikan Agama Islam
- 2. Hukum Keluarga Islam
- 3. Ilmu Hukum

- 4. Pendidikan Bahasa Indonesia
- 5. Pendidikan Bahasa Inggris
- 6. Manajemen

- 7. Ilmu Administrasi
- 8. Peternakan
- 9. Kenotariatan

- 10. Pendidikan Matematika

Program Studi Doktor :

- 1. Pendidikan Agama Islam

Jalan Mayjend Haryono 193 Malang, Jawa Timur 65144 Indonesia Telp. 0341 551932 Faks. 0341 552249 E-mail: administrasipascasarjana@unisma.ac.id Website: unisma.ac.id

Nomor : 017/B21/U.11/KPS/B.02/II/2025

Lamp : -

Hal : Permohonan ijin penelitian

Kepada Yth : Bapak/Ibu Pimpinan PT. Metsuma Anugrah Graha (Green Eleven)

Jl. Raya Pandaan - Bangil No.Km. 06, Kenepgunungan, Kenep, Kec. Beji,  
Pasuruan, Jawa Timur

**Assalamu'alaikum Wr. Wb.**

Dalam rangka melaksanakan penelitian *Jurnal Scopis* mahasiswa strata 2 (S2) sebagai salah satu syarat kelulusan Magister Manajemen Program Pascasarjana Universitas Islam Malang, maka mahasiswa kami:

Nama : Athoillah Hikam  
NPM : 22302081050  
Judul Penelitian : PENGARUH GREEN ORGANIZATIONAL CULTURE DAN GREEN INTELLECTUAL CAPITAL TERHADAP GREEN COMPETITIVE ADVANTAGE MELALUI GREEN HUMAN RESOURCE MANAGEMENT  
Tanggal Pelaksanaan : 20 Februari s.d 20 Maret 2025  
No Tlp dan e-mail : laksinfhikam@gmail.com / 089530401619

Bermaksud akan melaksanakan penelitian di PT. Metsuma Anugrah Graha (Green Eleven). Sehubungan dengan hal tersebut di atas, kami memohon kepada Bapak/Ibu Pimpinan PT. Metsuma Anugrah Graha (Green Eleven) berkenan memberikan ijin kepada mahasiswa tersebut. Demikian surat permohonan ini, atas perkenan dan kerja sama bapak/ibu kami ucapkan terima kasih.

**Wassalamu'alaikum Wr. Wb.**

Malang,  
KPS Magister Manajemen  
D. Nurhidayah. SE.,MM

UNISMA dari NU untuk Indonesia dan Peradaban Dunia





**UNIVERSITAS ISLAM MALANG  
( U N I S M A )  
PROGRAM PASCASARJANA  
TERAKREDITASI**

Program Studi Magister :

1. Pendidikan Agama Islam
2. Hukum Keluarga Islam
3. Ilmu Hukum

4. Pendidikan Bahasa Indonesia
5. Pendidikan Bahasa Inggris
6. Manajemen

7. Ilmu Administrasi
8. Peternakan
9. Kenotariatan

10. Pendidikan Matematika

Program Studi Doktor :

1. Pendidikan Agama Islam

Jalan Mayjend Haryono 193 Malang, Jawa Timur 65144 Indonesia Telp. 0341 551932 Faks. 0341 552249 E-mail. [administrasipascasarjana@unisma.ac.id](mailto:administrasipascasarjana@unisma.ac.id) Website: [unisma.ac.id](http://unisma.ac.id)

Nomor : 039/B21/U.11/KPS/B.02/V/2024  
Lamp : -  
Hal : Permohonan ijin penelitian  
Kepada Yth : Bapak Direktur PT Ciputra Development tbk.

Jl. Raya Surabaya - Malang No.Km 48, Sukorejo, Jawa Timur, Kec. Pandaan,  
Pasuruan, Jawa Timur 67156

**Assalamu'alaikum Wr. Wb.**

Dalam rangka menyelesaikan tugas akhir (Tesis) mahasiswa strata 2 (S2) Magister Manajemen Program Pascasarjana Universitas Islam Malang, maka mahasiswa kami:

Nama : Athoillah Hikam  
NPM : 22302081050  
Judul Penelitian : Pengaruh Green Organizational Culture dan Green Transformational Leadership Terhadap Competitive Advantage  
Tanggal Pelaksanaan : 11 Mei 2024 s.d 31 Mei 2024  
No Tlp dan e-mail : 089530401619 / [laksinfhikam@gmail.com](mailto:laksinfhikam@gmail.com)

Bermaksud akan melaksanakan penelitian di Direktur PT Ciputra Development tbk.. Sehubungan dengan hal tersebut di atas, kami memohon kepada Bapak Direktur PT Ciputra Development tbk. berkenan memberikan ijin kepada mahasiswa tersebut. Demikian surat permohonan ini, atas perkenan dan kerja sama bapak/ibu kami ucapkan terima kasih.

**Wassalamu'alaikum Wr. Wb.**

Malang, 11 Mei 2024  
Magister Manajemen  
  
A. H. Hikam, SE., MM  
PROGRAM PASCASARJANA

UNISMA dari NU untuk Indonesia dan Peradaban Dunia



Microsoft

CS Dipindai dengan CamScanner