# Fostering Green Innovation and Environmental Consciousness: A Pathway to Competitive Advantage in the Green Economy

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### ABSTRACT

This study seeks to identify the antecedents of green competitive advantage, as conventional marketing may no longer be able to effectively address this aspect. In this context, the study examines the interaction between the theory of reasoned action and green marketing, as well as how the combination of these theories influences green innovation and, by extension, green competitive advantage. To carry out this investigation, a quantitative approach was employed, utilizing questionnaires gathered through direct visits to 100 coffee shops in and around Jakarta, selected through purposive non-probability sampling. The collected data were subjected to analysis via Structural Equation Model (SEM), using SMART PLS.3 for processing. The findings underscore that both internal and external orientations impact green innovation, which in turn influences green competitive advantage. However, it's worth noting that the internal and external environmental orientations do not directly affect green competitive advantage. This study contributes to the body of knowledge in green marketing by affirming the pivotal role of green innovation in attaining green competitive advantage and bridging the connection between environmental orientation and competitive edge. Companies can allocate resources towards enhancing their green innovation efforts, leading to a stronger competitive position within the market. The study offers practical guidance for businesses seeking to enhance their green competitive advantage, the limitations should encourage researchers and practitioners to consider a more diverse range of industries and methodologies in future investigations.

Keywords: Internal environmental orientation, external environmental orientation, green innovation, green competitive advantage.

#### ABSTRAK

Tujuan dari penelitian ini adalah untuk memahami akar dari keunggulan kompetitif berkelanjutan, mengingat bahwa pemasaran konvensional mungkin tidak lagi efektif mengatasi aspek ini. Dalam konteks ini, penelitian ini menggali interaksi antara teori tindakan beralasan dan pemasaran berkelanjutan (green marketing), serta bagaimana kombinasi teori ini mempengaruhi inovasi berkelanjutan dan selanjutnya, keunggulan kompetitif berkelanjutan. Penelitian ini menggunakan pendekatan kuantitatif, menggunakan kuesioner yang dikumpulkan melalui kunjungan langsung ke 100 kedai kopi di sekitar Jakarta, yang dipilih melalui metode purposive non-probability sampling. Data yang terkumpul dianalisis melalui Model Persamaan Struktural (SEM), dengan menggunakan SMART PLS.3 untuk pengolahan data. Temuan menunjukkan bahwa baik orientasi pada lingkungan internal maupun eksternal berdampak pada inovasi ramah lingkungan, yang pada gilirannya mempengaruhi keunggulan kompetitif yang ramah lingkungan. Namun, perlu dicatat bahwa orientasi lingkungan internal dan eksternal tidak secara langsung mempengaruhi keunggulan kompetitif ramah lingkungan. Studi ini memberikan kontribusi pada pengetahuan dalam pemasaran ramah lingkungan dengan mengonfirmasi peran penting inovasi berkelanjutan dalam mencapai keunggulan kompetitif berkelanjutan dan menjembatani hubungan antara orientasi lingkungan dan keunggulan kompetitif. Perusahaan dapat mengalokasikan sumber daya untuk meningkatkan upaya inovasi ramah lingkungannya, yang dapat mengarah pada posisi kompetitif yang lebih kuat di pasar. Meskipun studi ini memberikan panduan praktis bagi bisnis yang ingin meningkatkan keunggulan kompetitif berkelanjutan mereka, batasan studi ini seharusnya mendorong para peneliti dan praktisi untuk mempertimbangkan berbagai industri dan metodologi yang lebih beragam dalam investigasi di masa depan.

Kata Kunci: Orientasi lingkungan internal, orientasi lingkungan eksternal, inovasi ramah lingungan, daya saing ramah lingkungan.

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### 1. Introduction

The imperative of preemptively identifying and addressing potential environmental degradation becomes increasingly evident (Smerichevskyi, Kniazieva, Kolbushkin, Reshetnikova, & Merta, 2018). These pressing concerns include the alarming depletion of the ozone layer, resulting in the dire consequences of global warming. This, in turn, poses a

significant threat to our precious islands, as rising sea levels put their very existence at risk. Additionally, the accumulation of inorganic waste is causing severe soil pollution, further exacerbating the environmental crisis. Moreover, the relentless expansion of human development is leading to the rapid depletion of our invaluable forests, which serve as the lungs of our planet (Capon & Corvalan, 2018).

The widespread use of plastic materials for food packaging, a practice widely adopted by food and beverage retailers, is one of the activities that must be restricted to prevent soil contamination. According to a report by the World Bank, Indonesia generates approximately 7.8 million tons of plastic waste annually. Approximately 4,9 million metric tons of plastic refuse are improperly managed, such as by not being collected, being dumped in open dumpsites, or escaping from poorly managed landfills. (World Bank, 2021). The growing consensus within society regarding environmental concerns is becoming increasingly prevalent. The phenomenon known as the greenhouse effect, the release of emissions into the atmosphere, the exploration of alternative energy sources, and the issue of resource scarcity are all intricately interrelated with the concept of green innovation (Meidute-Kavaliauskiene, Çiğdem, Vasiliauskas, & Yıldız).

The expansion of coffee shops has seen a remarkable surge, with the number of outlets soaring to over 2,950 by August 2019, nearly tripling the figure from 2016, which was only approximately 1,000 (Widyastuti, 2022). Antara News reported coffee shops play a prominent role in generating substantial plastic waste within urban regions. It's more challenging to persuade consumers to purchase green products in low-involvement categories than in high-involvement categories (Coşkun, Vocino, & Despite the existence of Polonsky, 2017). environmentally friendlier alternatives like paper containers, businesses persist in selecting plastic containers due to their cost-efficient nature.

In order to address the waste issue stemming from industrial activities, the government has stipulated that all types of businesses, regardless of their scale, must adopt environmentally sustainable operational practices as a cornerstone of their long-term management approach (Chen & Cao). At the empirical level, the prevalence of green innovation adoption is higher among large corporations, whereas smaller enterprises show a notably lower inclination toward it. On the theoretical front, there remains a scarcity of studies exploring the antecedents of green innovation in the existing literature (Wu, Wu, Wu, Ding, & Fan, 2022).

Embracing an environmental orientation, such as replace the use of plastic containers to biodegradable alternatives that swiftly decompose in soil, has the potential to earn a company environmental accreditation by aligning with government regulations (Mikhno, Koval, Shvets, Garmatiuk, & Tamošiūnienė, 2021). Furthermore, this move can elevate the company's image and reputation in the eyes of customers. (Cretu & Brodie, 2007) find environmental orientation can significantly bolster a company's competitive advantage. Many green companies that understand the importance of green practices in achieving sustainability are fully committed to the green revolution. A substantial 60 percent of these companies say they are willing to allocate funds to transform their business into a green operation, even if it means increasing the cost per unit of output (Moravcikova, Krizanova, Kliestikova, & Rypakova, 2017).

Despite the enthusiasm of many companies for a green revolution, skepticism remains, especially in the SME sector. They are concerned that the use of environmentally friendly raw materials will increase production costs, potentially making products less competitive in an already highly competitive market (Cuadro, Lobo, Arrieta, & Zambrano, 2019). The negative perceptions stemming from the adoption of friendly philosophies environmentally on performance are further reinforced by the findings of (Linder, Björkdahl, & Ljungberg, 2014) who found that environmentally oriented firms performed worse than their less environmentally oriented counterparts.

The environmental strategy promotes 'green' innovation for environmental sustainability (Arsawan, Koval, Duginets, & O. Kalinin, 2021). However, it remains unclear whether this strategy can also foster green competitive advantage at the firms' level. This study investigates how environmental orientation affects green innovation across SMEs sector exclusively in coffee shop industries. Two problems discuss: to what extent does the implementation of environmental orientation contribute to the enhancement of green innovation within coffee shop services? And what is the relationship between green innovation and the attainment of a competitive advantage in the context of environmentally conscious business practices?

This research helps SMEs embrace green practices. It emphasizes how environmental orientation can fuel green innovation and its competitive potential. As industries embrace sustainability, the study offers actionable information for SMEs in trying to strategically position themselves in a green market. Organizational strategies drive sustainable progress, and green innovation and competitive advantage are explored, contributing to strategic management expertise.

# 2. Teoritical Framework and Hyphothesis development

# 2.1. Green Marketing Strategy

Understanding people's attitudes regarding climate change challenges and hazards requires assessing their environmental orientation. To assess environmental behavioral change, various models

been used, including theory of have the environmentallv responsible behavior (ERB) developed by Hines, Hungerford, and Tomera in 1978, the theory of reasoned action (TRA) developed by Ajzen and Fishbein in 1980, the theory of planned behavior (TPB) developed by Ajzen in 1985, and the value belief norm (VBN) theory on environmentalism proposed by Sterm in 1999 (Situmorang, Hussain, & Chang, 2023). This study utilizes the Theory of Reasoned Action (TRA) and green markenting to develop a conceptual model for analyzing entrepreneurial behavioral choices, with a specific emphasis on personal and social factors.

Modern markets present a range of challenges that traditional marketing may no longer be able to effectively address green competititve advantage (Moravcikova, Krizanova, Kliestikova, & Rypakova, 2017). As a result, a new strategic marketing philosophy known as green marketing emerged (Vilkaité-Vaitoné & Skačkauskienė, 2019). Green marketing is a process that involves developing and promoting products and services that meet customers' demands for high-quality, highperformance, convenient, and affordable products (Haribabu, 2017). This paper presents new insights based on established TRA and green marketing as the source of competititve advantage (Moravcikova, Kliestikova, & Rypakova, Krizanova, 2017). Companies can drive green innovation and distinguish themselves from competitors by incorporating lowcost strategies, differentiation, or focus (Ginsberg & Bloom, 2004).

# 2.2. Environmental Orientation and Green Competitive Advantage.

The concept of environmental orientation refers to the sense of corporate responsibility towards the environment, which demonstrates an acknowledgement of the impact that businesses have on the ecological environment and their commitment to minimizing this impact. Environmental orientation refers to the inherent organizational value system and cultural norms that prioritize and promote proenvironmental management practices (Yang & Jiang, 2023). Environmental orientation is structured across two dimensions. The initial dimension, known as internal environmental orientation, pertains to managerial viewpoints regarding the importance of environmental matters within their organization. The second dimension, termed external environmental orientation, encompasses the need to cater to the anticipations of external stakeholders (Banerjee, 2002). Having an environmental orientation can lead to better environmental performance in situations information where external sharing for environmental solutions is applied (Roberto Chavez, 2021). The empirical findings indicate a positive association between both internal and external environmental orientations and the three key components of green supply chain management: environmental selection, monitoring, and collaborative engagement with suppliers (Bu, Dang, Wang, & Liu, 2020). There is a consensus exists within the green marketing philosophy that integrating environmental considerations into all facets of business can yield green competitive advantage. External market trends and changes also serve as a guide for marketing strategies, considering their impact on business operations (Smerichevskyi, Kniazieva, Kolbushkin, Reshetnikova, & Merta, 2018). H1: External environmental orientation has impact on green competitive advantage.

H2: Internal environmental orientation has impact on green competitive advantage.

# 2.3. Environmental Orientation and Green Innovation.

Green innovation refers to the creation and deployment of eco-friendly technologies, products, and processes (Barforoush, Etebarian, Naghsh, & Shahin, 2021). Environmental strategy promotes green innovation in realizing environmental performance (Arsawan, Koval, Duginets, & O. Kalinin, 2021) (Arsawan, Koval, Duginets, & O. Kalinin, 2021). Studies indicate that environmental orientation positively influences green innovation within organizations. A natural resource-based perspective contends that firms can gain a competitive edge by efficiently managing their natural resource endowments (Hart, 1995). Changes in external factors affect the internal operations of a business and shaping its growth and create incremental or radical innovation (Abbas & Sağsan, 2019). This approach highlights the significance of utilizing environmental resources and abilities to stimulate innovation and generate value. Companies with a solid environmental focus are inclined to invest in research and development endeavors that concentrate on green innovation. Such investments can result in the creation of novel eco-friendly technologies, products, and processes that offer a competitive advantage in the market. Moreover, going green can result in cost savings by increase resource efficiency and reduce environmental impact. The environmental orientation of firms is a significant determinant that exerts a substantial influence on the level of commitment towards green innovation (Yang & Jiang, 2023).

H3: External environmental orientation has impact on green innovation.

H4: Internal environmental orientation has impact on green innovation.

# 2.4. Green Innovation and Green Competitive Advantage

Green innovation can be a strategic resource to attain a competitive advantage (Barforoush, Etebarian, Naghsh, & Shahin, 2021). Large companies enjoy a competitive edge over small and mediumsized enterprises because of implement green innovation (Abbas & Sağsan, 2019). The

implementation of green innovation not only drives the advancement of environmentally conscious technologies but also involves monitoring. To attain similar benefits enjoyed by these larger entities, it becomes imperative for small and medium-sized businesses to adopt green strategic approaches and concepts (Arsawan, Koval, Duginets, & O. Kalinin, 2021).

Previous research findings consistently highlight the positive impact of green innovation on various aspects of performance. Green innovation has been linked to driving resource efficiency and bolstering corporate reputation (Farza, Ftiti, Hlioui, Louhichi, & Omri, 2021). Additionally, it has been shown to enhance both environmental and economic performance (Meidute-Kavaliauskiene, Çiğdem, Vasiliauskas, & Yıldız) (Meidute-Kavaliauskiene, Çiğdem, Vasiliauskas, & Yıldız). Moreover, green innovation has the potential to mitigate negative external environmental impacts (Burki & Dahlstrom, 2017) (Burki & Dahlstrom, 2017). This is further supported by research indicating that green innovation yields positive environmental effects, particularly when consumers engage with products incorporating such innovations (Yang & Roh, 2019) (Yang & Roh, 2019). Building upon these findings, the hypothesis for this study posits that the integration of green innovation contributes to achieving a competitive advantage through its positive influence resource efficiency, corporate reputation, on environmental and economic performance, as well as the mitigation of adverse environmental impacts. H5: Green innovation has a positive impact on green competitive advantage.

### 2.5. Intermediary Effect of Green Innovation

The shift towards consumer-driven environmentalism and the imposition of stringent international regulations have instigated shifts in the landscape global of industrial competition, consequently heightening the significance of corporate environmental management (Yu-Shan Chen, 2006). Through the embrace of proactive strategies within environmental management, companies not only safeguard themselves against protests and penalties but also unlock novel avenues for market expansion and amplify their competitive standing . A pivotal constituent of corporate environmental stewardship, green innovation comprises both green product and green process innovation (Yu-Shan Chen, 2006). Emerging evidence establishes a positive nexus between the performance of green innovation and a corporation's competitive advantage (Yu-Shan Chen, 2006). The realm of green innovation empowers enterprises to augment resource efficiency, secure early entrant advantages, enhance their corporate image, tap into unexplored market niches, and secure a distinct competitive edge (Yu-Shan Chen, 2006). Notably, green innovation functions as a mediator in the intricate interplay

between corporate environmental ethics and the attainment of competitive advantage (Chang, 2011). It is imperative for businesses to discern the precise value and positioning of green innovation (Yu-Shan Chen, 2006). Furthermore, the intermediary role of sustainable dynamic capability comes into play, mediating the relationship between environmental orientation and green innovation, alongside other sustainable outcomes (Liboni, Cezarino, Alves, Jabbour, & Venkatesh, 2022). In the context of the hospitality sector, green innovation emerges as a mediator in the linkage between firm-level environmental ethics and competitive advantage, as highlighted by (Fatoki, 2021). Thus, the mediation provided by green innovation extends between the dimensions of environmental orientation and the eventual realization of green competitive advantage.

H6: Green innovation mediate the indirect relationship of internal environmental orientation to the firm's green innovation.

H7: Green innovation mediate the indirect relationship between external environmental orientation on a firm's green innovation.

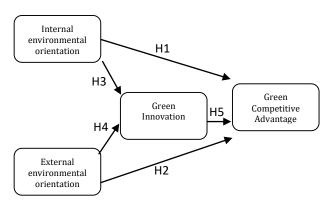


Figure 1. The conceptual research framework

#### 3. Research Methods

This study adopts a quantitative design, with the research subject being coffee shop business owners in Jakarta. As a business hub and the capital city, Jakarta holds an allure for café and restaurant ventures. However, it should be acknowledged that competition within the hospitality sector in Jakarta is also highly intense. The population selected for this study comprises coffee shops operating in Jakarta. It is not known how many coffee shops there are in Jakarta, so the sample size is determined based on the guidelines provided by Hair, Babin, & Anderson (2019) suggest calculating the sample size by multiplying the number of indicators in a variable by 5 to 10. As this study has 16 indicators, the minimum sample size required would be 80 respondents (16 x 5), while the maximum sample size would be 160 respondents (16 x 10). A non-random purposive sampling method was employed to collect data. The criteria are as follows: the business has been operational for at least 3 years and has implemented one or more of the following environmental practices (Martinsen & Huge-Brodin,

2014): (1) minimizes the use of lighting and utilizes sunlight for illumination, (2) reduces reliance on air conditioning and employs natural ventilation for air circulation, (3) imparts environmental sustainability education to employees, and (4) holds ISO 14001 certification.

7-item instrument to measure The the environmental orientation was adopted from Feng et al. (2018), while the 7-item scale to measure green innovation and the 3-item scale to measure green competitive advantage were adopted from Zameer (2022). Internal environmental orientation refers to the company's commitment to environmental sustainability within its own operations, while external environmental orientation refers to the company's efforts to influence suppliers, partners, and customers to adopt sustainable practices. Scoring for each item utilizes a Likert scale ranging from 1 to 5 (very inappropriate - very appropriate). All were completed through instruments self-The statement items, to which assessment. participants responded, are displayed in Table 3, accompanied by their corresponding mean scores. The field representatives took the data directly to the coffee shop locations and the questionnaires were answered by the operations manager or equivalent.

| Category  | Subcategory                          | Frequency/<br>Percentage |  |
|-----------|--------------------------------------|--------------------------|--|
| Job title | Business owner                       | 16                       |  |
| ,         | Manager                              | 84                       |  |
|           | Total                                | 100                      |  |
| Gender    | Male                                 | 67                       |  |
|           | Female                               | 33                       |  |
|           | Total                                | 100                      |  |
| Length of | 1 – 5 years                          | 77                       |  |
| operation | Above five years                     | 33                       |  |
| -         | Total                                | 100                      |  |
| Number of | 1 – 5                                | 63                       |  |
| employees | 6 - 10                               | 30                       |  |
|           | Above 10                             | 7                        |  |
|           | Total                                | 100                      |  |
| Estimated | Rp. 0 – Rp. 49.999.999               | 25                       |  |
| Revenue   | Rp.50.000.000 – Rp.<br>99.999.999    | 44                       |  |
|           | Rp. 100.000.000 – Rp.<br>149.999.999 | 24                       |  |
|           | Above Rp. 150.000.000                | 7                        |  |
|           | Total                                | 100                      |  |
| Location  | North                                | 20                       |  |
|           | Central                              | 7                        |  |
|           | West                                 | 22                       |  |
|           | South                                | 49                       |  |
|           | East                                 | 2                        |  |
|           | Total                                |                          |  |

**Table 1.** Demographics of samples

Source: Field survey 2022

The presented demographic analysis in Table 1 offers valuable insights into the characteristics of the sampled establishments. As for job titles, most respondents (84%) hold managerial positions, and a

significant portion (16%) are business owners. The gender distribution indicates male dominance with 67% male respondents compared to 33% female respondents. According to the analysis of the length of operation, 77% of establishments have been operating for 1 to 5 years, while 33% have been operating for over five years. A significant percentage (63%) of the establishments have a staff count ranging from 1 to 5 employees. Additionally, 30% have 6 to 10 employees, while a smaller fraction (7%) has more than 10 employees. The revenue distribution of the establishments is spread across different brackets. Of these, 25% of the establishments fall within the range of Rp. 0 to Rp. 49.999.999, 44% within Rp. 50.000.000 to Rp. 99.999.999, 24% within Rp. 100.000.000 to Rp. 149.999.999, while only 7% exceed Rp. 150.000.000. The majority of the establishments are located in the South (49%), followed by the West (22%), North (20%), Central (7%), and East (2%). The demographic analysis provides a foundational understanding of sample composition, which is crucial for contextualizing the subsequent research findings.

The next section will present the outcomes of instrument validation, as well as the results of hypothesis testing, which were obtained by implementing the Smart-PLS 3 data processing tool.

#### 4. Results and Discussion

#### 4.1 Evaluation of Measurement Model

The validity and reliability of the measurement model are assessed in Table 2. Loading factors demonstrate the strength of the relationship between items and their respective constructs. The Average Variance Extracted (AVE) values provide insight into the proportion of variance captured by the constructs in relation to their measured indicators. Adequate AVE values (above 0.5) are indicative of good convergent validity. The Cronbach's alpha coefficient, denoting internal consistency, showcases the reliability of the constructs. Generally, values above 0.7 indicate satisfactory reliability.

For the Internal Environmental Orientation (IEO) construct, all items (IEO1, IEO2, IEO3, and IEO4) exhibit substantial loading factors, affirming their strong connection to the construct. The construct's AVE of 0.808 surpasses the acceptable threshold of 0.5, indicating favorable convergent validity. Additionally, the Cronbach's alpha coefficient of 0.921 signifies high internal consistency.

Similar trends are observed for the External Environmental Orientation (EEO) construct. Items EEO1, EEO3, and EEO3 exhibit substantial loading factors, endorsing their solid relationship with the construct. The AVE value of 0.788 indicates satisfactory convergent validity, while the Cronbach's alpha coefficient of 0.865 indicates commendable reliability.

| Table 2. Measurement Model Evaluation |                   |       |                     |  |
|---------------------------------------|-------------------|-------|---------------------|--|
| Item                                  | Loading<br>Factor | AVE   | Cronbach's<br>alpha |  |
| IEO1                                  | 0,898             |       |                     |  |
| IEO2<br>IEO3                          | 0,892<br>0,902    | 0,808 | 0,921               |  |
| IEO4<br>EEO1                          | 0,904<br>0,874    | 0.700 | 0.045               |  |
| EEO2<br>EEO3<br>GI1                   | 0,875<br>0,913    | 0,788 | 0,865               |  |
| GI2<br>GI3                            | 0,753<br>0,874    |       |                     |  |
| GI3<br>GI4<br>GI5                     | 0,834<br>0,879    | 0,676 | 0,904               |  |
| GI6                                   | 0,844<br>0,739    |       |                     |  |
| GCA1<br>GCA2                          | 0,900<br>0,891    | 0,788 | 0,876               |  |
| GCA3                                  | 0,894             |       |                     |  |

Regarding the Green Innovation (GI) construct, items GI1, GI3, GI4, GI5, and GI6 showcase substantial loading factors, attesting to their robust connection with the construct. The construct's AVE of 0.676, while acceptable, could benefit from improvement. The Cronbach's alpha coefficient of 0.904 is indicative of strong reliability.

Green Competitive Advantage (GCA) construct's items GCA1, GCA2, and GCA3 demonstrate substantial loading factors, underscoring their strong association with the construct. The AVE value of 0.788 indicates good convergent validity, and the Cronbach's alpha coefficient of 0.876 reflects reliable internal consistency.

### Statistics Descriptive

Table 3 illustrates consistently high mean scores across the measurement statements, underscoring the coffee shop's strong dedication to environmental orientation, innovation, and competitive advantage. These findings provide valuable insights into the alignment of the coffee shop's practices with its environmental goals and strategies.

Internal Environmental Orientation (IEO) construct, the measurement statements (IEO1 to IEO4) reveal consistent high mean scores ranging from 4.16 to 4.35. These scores reflect a strong organizational commitment to environmental conservation and an emphasis on prioritizing ecofriendly practices within the coffee shop's activities. (EEO) External Environmental Orientation construct's measurement statements (EE01 to EE03) exhibit commendable mean scores ranging from 3.95 to 4.08. These values illustrate the organization's proactive stance in scanning the external environment for opportunities and threats, engaging stakeholders for feedback, and being adaptable in response to environmental shifts.

| CodeMeasurement StatementMeanIEO1We strive to make every employee care<br>about environmental conservation.<br>In every corner of our shop, we display a4,35IEO2clear and urgent policy statement about<br>environmental preservation is our top<br>priority in every activity of our coffee<br>shop4,16IEO3priority in every activity of our coffee<br>shop4,27IEO4Protecting the environment is a priority<br>task in our coffee shop business4,17Our organisation is constantly scanning<br>opportunities and threats<br>Our organisation actively seeks out and<br>environment.3,95IEO2listens to feedback from customers,<br>our organisation is prepared to embrace3,97Cour company has received recognition4,18GI1or awards for environmental ly friendly<br>practices or products."<br>Our company has inplemented energy-<br>efficient technologies and practices to<br>reduce our environmental limpact<br>Our company has cellaborated with<br>external partners (e.g., suppliers,<br>customers, NGOS) to develop and<br>implement green initiatives<br>Our company has received recognition4,36GI3ergets for reducing our environmental<br>import and regularly tracks and reports4,36GI4targets for or educe our<br>environmental limpact<br>Our company has received recognition4,36GI5Findly practices or products4,36GI6or awards for our environmental<br>import we sys to reduce our<br>environmental limpact4,36GI5Findly practices or products4,36GI6or awards for our environmental<br>import we sys to reduce our<br>environmental limpact <th colspan="5">Table 3. Mean and Measurement Statement</th>   | Table 3. Mean and Measurement Statement |   |      |  |  |
|---|---|---|------|--|--|
| IEO1about environmental conservation.<br>In every corner of our shop, we display a4,35IEO2clear and urgent policy statement about<br>environmental awareness<br>Environmental preservation is our top4,16IEO3priority in every activity of our coffee<br>shop4,2IEO4Protecting the environment is a priority<br>task in our coffee shop business4,17Our organisation is constantly scanning<br>EE01the external environment for new<br>opportunities and threats<br>Our organisation actively seeks out and<br>listens to feedback from customers,<br>Our organisation is prepared to embrace3,97EE03risk to adjust to shifts in the external<br>environment.4,08Our company has received recognition<br>our company has received recognition4,55GI1or awards for environmentally friendly<br>practices or products."<br>Our company has collaborated with<br>external partners (e.g., suppliers,<br>our company has established goals and<br>targets for reducing our environmental<br>impact and regularly tracks and reports<br>on our progress<br>Our company has received recognition4,36GI4targets for our environmental<br>impact and regularly tracks and reports<br>on our progress<br>Our company has received recognition4,36GI5The firm has reduced its carbon<br>footprint or greenhouse gas emissions.<br>The firm has developed new<br>environmentally sustainable products<br>or services.<br>Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental<br>firm's commitment to environmental4,19   | Code                                    | Measurement Statement                     | Mean |  |  |
| IEO1about environmental conservation.<br>In every corner of our shop, we display a4,35IEO2clear and urgent policy statement about<br>environmental awareness<br>Environmental preservation is our top4,16IEO3priority in every activity of our coffee<br>shop4,2IEO4Protecting the environment is a priority<br>task in our coffee shop business4,17Our organisation is constantly scanning<br>EE01the external environment for new<br>opportunities and threats<br>Our organisation actively seeks out and<br>listens to feedback from customers,<br>Our organisation is prepared to embrace3,97EE03risk to adjust to shifts in the external<br>environment.4,08Our company has received recognition<br>our company has received recognition4,55GI1or awards for environmentally friendly<br>practices or products."<br>Our company has collaborated with<br>external partners (e.g., suppliers,<br>our company has established goals and<br>targets for reducing our environmental<br>impact and regularly tracks and reports<br>on our progress<br>Our company has received recognition4,36GI4targets for our environmental<br>impact and regularly tracks and reports<br>on our progress<br>Our company has received recognition4,36GI5The firm has reduced its carbon<br>footprint or greenhouse gas emissions.<br>The firm has developed new<br>environmentally sustainable products<br>or services.<br>Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental<br>firm's commitment to environmental4,19   | 1004                                    |   | 4.05 |  |  |
| IE02clear and urgent policy statement about<br>environmental awareness<br>Environmental preservation is our top<br>priority in every activity of our coffee<br>shop4,16IE03priority in every activity of our coffee<br>shop4,2IE04Protecting the environment is a priority<br>task in our coffee shop business4,17Our organisation is constantly scanning<br>the external environment for new<br>opportunities and threats<br>Our organisation actively seeks out and<br>EE023,95Our organisation actively seeks out and<br>environment.3,97Our organisation is prepared to embrace<br>erisk to adjust to shifts in the external<br>environment.4,08G11or awards for environmentally friendly<br>practices or products."<br>Our company has implemented energy-<br>G12 efficient technologies and practices to<br>reduce our environmental limpact<br>Our company has collaborated with<br>external partners (e.g., suppliers,<br>customers, NGOs) to develop and<br>implement green initiatives<br>Our company has received recognition<br>on our progress<br>Our company has received recognition<br>G16 or awards for our environmental<br>impovative ways to reduce our<br>environmental Impact<br>Our company has received recognition<br>of or awards for our environmentally<br>friendly practices or products."4,36GCA1The firm has reduced its carbon<br>footprint or greenhouse gas emissions.<br>The firm has developed new<br>GCA2<br>environmentally sustainable products<br>or uc ustomers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental<br>firm's commitment to environmental<br>firm's commitment to environmental4,13  | IE01                                    |   | 4,35 |  |  |
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| GCA1footprint or greenhouse gas emissions.<br>The firm has developed new4,19GCA2environmentally sustainable products<br>or services.<br>Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental4,13   |   | friendly practices or products            |      |  |  |
| GCA3footprint or greenhouse gas emissions.The firm has developed newGCA2environmentally sustainable productsor services.Our customers, suppliers, employees,and other stakeholders aware of thefirm's commitment to environmental   | 6641                                    | The firm has reduced its carbon           | 4.10 |  |  |
| GCA2environmentally sustainable products4,07or services.Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental4,13   | GUAI                                    | footprint or greenhouse gas emissions.    | 4,19 |  |  |
| GCA3 or services.<br>Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental 4,13   |   | The firm has developed new                |      |  |  |
| GCA3 Our customers, suppliers, employees,<br>and other stakeholders aware of the<br>firm's commitment to environmental 4,13   | GCA2                                    | environmentally sustainable products      | 4,07 |  |  |
| GCA3 and other stakeholders aware of the firm's commitment to environmental 4,13  |   | or services.                              |      |  |  |
| GCA3 firm's commitment to environmental 4,13  |   |   |      |  |  |
| firm's commitment to environmental  | 6643                                    | and other stakeholders aware of the       | 1.12 |  |  |
| sustainability  | UCAS                                    | firm's commitment to environmental        | 4,10 |  |  |
|   |   | sustainability                            |      |  |  |

Green Innovation (GI) construct, as indicated by its measurement statements (GI1 to GI6), demonstrates robust mean scores, with values ranging from 4.07 to 4.55. These scores underline the company's proactive adoption of green practices, collaborative efforts with external partners, setting and tracking environmental goals, and fostering a culture of employee-driven eco-friendly innovations.

Green Competitive Advantage (GCA) construct's measurement statements (GCA1 to GCA3) also show favorable mean scores ranging from 4.07 to 4.19. These scores highlight the firm's achievements in reducing its carbon footprint, developing sustainable products, and effectively communicating its commitment to environmental sustainability to various stakeholders.

#### 4.2. Hypothesis Testing

testing The hypothesis procedure via bootstrapping entails the computation of t-values as its output. The criterion for accepting a hypothesis is contingent upon the bootstrapping value exceeding 1.96. Table 4 simultaneously displays the path coefficient, t statistics, and p-values for each direct relationship between variables and the indirect one (Hair, Babin, & Anderson, 2019).

Table 4. Inner Model Evaluation

| Path                  | t-statistics | p-value | Result           |
|-----------------------|--------------|---------|------------------|
| IEO $\rightarrow$ GCA | 4,285        | 0,000   | H1: accepted     |
| $EEO \rightarrow GCA$ | 0,166        | 0,284   | H2: Not accepted |
| IEO → GI              | 4,192        | 0,000   | H3: accepted     |
| EEO→ GI               | 2,466        | 0,009   | H4: accepted     |
| $GI \rightarrow GCA$  | 2,880        | 0,004   | H5: accepted     |
| IEO→GI→ GCA           | 2,148        | 0,032   | H6: accepted     |
| EEO→GI→ GCA           | 2,302        | 0,022   | H7: accepted     |

The structural equation model data analysis revealed that the t-statistic value exceeded 1.98 and the p-value was less than 0.05. According to this, internal environmental orientation has a statistically significant effect on green competitive advantage (H1 Accepted); internal environmental orientation has a statistically significant effect on green innovation (H3 Accepted); external environmental orientation has a statistically significant effect on green innovation (H4 Accepted); and green innovation has a statistically significant effect on green competitive advantage. Hypothesis 2 (H2) was rejected because the t-statistic value was less than 1.98 and the p-value was more than 0.05. As a result, external environmental orientation has no effect on green competitive advantage.

The hypothesis will then be tested further by investigating the indirect effect of internal and external environmental orientation on green competitive advantage via green innovation. According to the calculation results, green innovation considerably mediates the indirect influence of internal and external environmental orientation on green competitive advantage. As a result, H6 and H7 are acceptable.

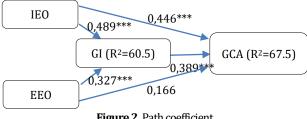


Figure 2. Path coefficient

The path coefficient values for each relationship are shown in Figure 2. The internal focus on the environment has a strong impact on both green competitive advantage (0.446) and green innovation (0.489). This means that the internal environmental orientation indirectly influences green competitive advantage through green innovation, with an effect size of 0.190. Therefore, the overall impact of internal environmental orientation on green innovation is 0.636. The total effect indicates the complete amount of variation in green innovation that can be accounted for by internal environmental orientation. Green innovation plays a role in partially connecting the indirect impact of internal environmental orientation on green competitive advantage.

Subsequently, since external environmental orientation does not have a significant direct effect on green competitive advantage, its indirect effect is 0.127. Therefore, green innovation fully mediates the indirect effect of external environmental orientation on green competitive advantage. Fully mediating means that the relationship between the independent variable (external environmental orientation) and the dependent variable (green competitive advantage) is entirely explained by the mediating variable (green innovation). This suggests that any effect of external environmental orientation on green competitive advantage is entirely transmitted through green innovation.

The consequence of full mediation is that the indirect effect of the independent variable on the dependent variable becomes the sole route through which the independent variable can affect the dependent variable. This highlights the importance of the mediating variable in explaining the relationship between the independent variable and the dependent variable.

In practical terms, this finding suggests that if an organization wants to improve its green competitive advantage by focusing on external environmental orientation, it should prioritize efforts to enhance green innovation. Without improvements in green innovation, any efforts to improve external environmental orientation may not lead to significant improvements in green competitive advantage.

The R-square coefficient values depict the extent to which the independent variables can account for the variation in the dependent variable. For example, in this model, the variables IEO, EEO, and GI can account for 67.5% of the variance in GCA, and IEO and EEO can account for 60.5% of the variance in GI (Figure 2). Thus, internal and external environmental orientation variables are sufficiently effective in explaining the variation of values in green innovation and green competitive advantage.

#### 4.3. Discussion

Human behavior is influenced by two primary personal factors determinants: encompassing individual beliefs, environmental orientation, experiences, intelligence, and demographics including education, gender, income, and religion; and societal factors encompassing social norms, culture, economy, and social environment (Situmorang, Hussain, & Chang, 2023). The effects of these factors on the development of pro-environmental behavior exhibit heterogeneity. Hence, it is imperative to acquire a

comprehensive comprehension of the underlying incentives that shape individuals' environmental conduct in order to foster the establishment of a sustainable trajectory for the future.

The first hypothesis regarding the influence of internal environmental orientation on green competitive advantage is supported. An increase in the level of internal environmental organization correlates with an increase in green competitive advantage. This finding aligns with the research findings of (Hart, 1995), (Russo & Fouts, 1997) (Sharma & Vredenburg, 1998), but diverges from (Delmas & Toffel, 2004), who assert that the impact of internal environmental orientation needs support from other variables, such as managerial responses to external pressures. This finding also contrasts with (Hsu, Tan, Hathaway, & Zailani, 2023), who discovered that internal environmental orientation does not have an impact on green competitive advantage.

The literature offers a coherent perspective on the relationship between internal environmental orientation and green competitive advantage. According to (Hart, 1995), concentrating on resource efficiency and sustainability through internal environmental orientation could enhance green competitive advantage. Building on this, (Russo & Fouts, 1997) argue that firms with a strong internal environmental orientation can attain competitive advantage by improving environmental performance. Similarly, (Sharma & Vredenburg, 1998) contend that proactive environmental strategies, stemming from internal environmental orientation, can reinforce valuable organizational capabilities, thus enhancing competitive advantage. This interconnected view underscores the significance of internal green environmental orientation in fostering competitive advantage.

In contrast, (Delmas & Toffel, 2004) highlight the importance of institutional pressures in shaping the environmental practices of firms. According to them, internal environmental orientation is significant, but managers' reactions to external pressures also influence environmental practices. Thus, internal orientation alone may not be enough to gain a competitive edge in the eco-friendly market. Furthermore, (Hsu, Tan, Hathaway, & Zailani, 2023), found that the direct effect of internal networking orientation on performance is negligible. This finding suggests that internal environmental orientation may not directly impact green competitive advantage.

Our next finding also supports the hypothesis that there is an impact internal environmental orientation on green competitive advantage. This finding is supported by (Hart, 1995) and (Sharma & Vredenburg, 1998). In the context of our discussion, Hart (1995) introduces a natural resource-based perspective that posits firms aligning their strategies with internal environmental factors as potential sources of competitive advantage. This conceptual framework implies that internal environmental orientation may play a crucial role in driving green innovation within the organizational context. Companies emphasizing proactive environmental strategies are more inclined to nurture unique organizational capabilities that, in turn, can serve as facilitators of green innovation (Sharma & Vredenburg, 1998).

Green innovation holds a significant sway over green competitive advantage, aligning with earlier research (El-Kassar & Singh, 2019; Sarkis, Zhu, & Lai, 2011; Delmas & Toffel, 2004). Nonetheless, this trend diverges from the conclusions of (Novitasari & Agustia, 2022), who reported that green innovation displayed negligible influence on green competitive advantage. To establish themselves as credible environmentally conscious entities, companies must actively devise and implement a green innovation strategy as a core aspect of their eco-friendly initiatives. A well-crafted green innovation strategy can ultimately translate into improved performance in the realm of green competitive advantage. It's noteworthy that green innovation yields a positive impact on green competitive advantage (Chen & Cao). This sentiment is further reinforced by Soewarno, Tjahjadi, & Fithrianti (2019), who concurred with the assertion that green innovation significantly influences green competitive advantage.

The Mediating Role of Green Innovation

The analysis regarding the hypothesis mediation underscores the pivotal intermediary function of green innovation, effectively mediating the indirect influence that stems from external environmental orientation to green competitive advantage. This alignment in findings echoes the conclusions drawn by Hsu, Tan, Hathaway, & Zailani (2023), who emphasized the indirect impact of external networking orientation on performance through the conduit of green practices.

In the food and beverage sector, the adoption of green competitive advantage has become increasingly important, customers are demanding as environmentallv sustainable practices. Environmental orientation, both internal and external, can play a significant role in achieving this competitive advantage. According to a study (Niemann et al., 2020; Zhou et al., 2020). Ginsberg & Bloom (2004) categorized green marketing activities into four groups: lean, defensive, shared, and extreme. In the first group, green marketing is employed to lower costs and enhance efficiency while adhering to environmental sustainability standards, thus establishing a competitive advantage centered on cost-effectiveness. The second group employs green marketing to proactively avert potential future environmental harm. The third group harnesses green marketing to foster green innovation for the sake of achieving a competitive advantage in sustainability. The fourth group comprises companies fully integrating green marketing strategies across

marketing channels, even encompassing the creation of niche products from the ground up. Consequently, our mediating hypothesis aligns with and supports this conceptual framework.

External environmental orientation can also play a critical role in achieving a green competitive advantage through green innovation (Farza, Ftiti, Hlioui, Louhichi, & Omri, 2021). Companies can use their influence to encourage suppliers and partners to adopt sustainable practices, thereby improving the overall sustainability of their supply chain. This can lead to increased customer loyalty and brand differentiation, as consumers increasingly prioritize environmental responsibility.

However, achieving a green competitive advantage through environmental orientation is not without its challenges (Fatoki, 2021). Companies must be committed to sustainable practices both internally and externally, which can require significant investments in time, money, and resources. Additionally, the effectiveness of external environmental orientation depends on the willingness of partners and suppliers to adopt sustainable practices, which may not always be a priority for them.

Environmental orientation plays a crucial role in promoting green innovation and competitive advantage. It provides a foundation for sustainable practices and enables companies to adapt to changing environmental conditions. These findings are consistent with the journal article Fatoki (2021) which states that internal environmental orientation positively and significantly affects green innovation. In order to achieve green innovation and competitive advantage, the firm needs to concentrate on its internal environmental management practices that involve waste reduction, energy efficiency, and sustainable production methods. By prioritising these practices, the firm can achieve cost savings and improve environmental performance, further facilitating the development of new products, services, or environmentally sustainable processes. These explain why companies with a solid internal environmental orientation are often better positioned to respond to increasing environmental regulations, consumer demand for sustainable products, and other environmental pressures. In addition, by developing an internal environmental orientation, the companies have a better chance to have a competitive advantage in the market (Adomako, Amankwah-Amoah, Danso, Konadu, & Owusu-Agyei, 2019).

While external environmental orientation can be an essential factor in promoting environmental sustainability practices (Zehir & Ozgul, 2020), therefore, companies must take a holistic approach considering internal and external factors to achieve sustainable competitive advantage in today's business environment. For example, companies can achieve a competitive advantage by developing innovative products or services that are environmentally sustainable. However, this type of innovation may be driven by something other than external environmental orientation but rather by internal research and development efforts (Zehir & Ozgul, 2020).

Concerning research findings, external guidance is more effective in improving business performance when government business support is present in the business environment (Pulka, Ramli, & Mohamad, 2021). Previous research has shown that public increasingly institutions are adopting environmentally responsible approaches to reduce their ecological footprint and encourage citizens and local businesses to adopt sustainable practices in living and working. The people also took greater responsibility for encouraging (Alpenberg, Wnuk-Pel, & Heneback). The external environmental orientation is, therefore, more focused on providing public goods that the government should promote. On the other hand, private institutions are reluctant to get involved in improving the public environment. This argument can explain why external attention to the environment does not affect green competitive advantage (Chen & Cao, 2023; Zameer et al., 2022).

## 5. Conclusion

This research evaluated the competitive edge of coffee shops in DKI Jakarta The finding indicate that internal environmental orientation considerably influences green innovation. Coffee shops focus on energy conservation, waste reduction, recycling, and resource utilisation in their targeted approach to innovation, implying this finding. Furthermore, the activities and programs implemented by coffee shops reflect their commitment to maintaining high values and preserving the environment.

In conclusion, the incorporation of green competitive advantage within the coffee shop industry can be shaped by the company's internal environmental orientation. The internal environmental orientation can assist the coffee shop sector in waste reduction, energy conservation, and carbon footprint reduction. Consequently, this can result in cost savings and enhanced environmental performance, both of which are conducive to attaining a green competitive advantage.

Nevertheless, external environmental orientation does not exert a direct impact on green competitive advantage, it has a significant influence on green innovation. Given the absence of a direct effect within external environmental orientation, the comprehensive mediating capacity of green innovation becomes apparent, seamlessly bridging the route from external environmental orientation to green competitive advantage.

The internal focus on environmental orientation significantly impacts the attainment of a green competitive advantage. This result suggests that coffee shops prioritize environmental considerations and adherence to conservation policies,

demonstrating responsible environmental management practices that contribute to their enhanced competitive edge. On the other hand, the influence of external environmental orientation on Green Competitive Advantage was not found to be significant.

Green innovation significantly impacts competitive advantage. To begin, the creation of secure and reusable materials to diminish waste and prevent harm to consumer well-being, coupled with streamlined resource utilization, contributes to the company's competitive stance. Furthermore, the company can introduce innovation across products and processes, enhancing efficiency and effectiveness. Another avenue involves adapting and enhancing offerings through innovative and creative approaches, thus augmenting the coffee shop's market competitiveness. Notably, green innovation serves as mediating factor, indirectly influencing the а between internal relationship and external environmental orientations and green competitive advantage. This discovery underscores the pivotal role of green innovation in achieving optimal profitability while maintaining environmental considerations.

There are limitations to studying. The research mainly depends on quantitative data and does not include qualitative insights from coffee shop owners or managers. Including qualitative data can provide a complete context and help us better understand the mechanisms behind the complex observed relationships. The study mainly focuses on the shortterm effects and immediate outcomes, which may restrict our complete understanding of the longlasting impacts of green innovation and competitive advantage within the limited timeframe. Moreover, the research does not thoroughly examine the possible impact of external factors, like economic conditions, market trends, and policy changes, which could interact with the studied variables. Therefore, giving more thought and exploration to these aspects is necessary. Hence, it is important for future research to consider the variables mentioned and broaden the geographic scope to address this gap.

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