GREEN INTELLECTUAL CAPITAL MEASUREMENT IN THE HOTEL INDUSTRY: THE DEVELOPING COUNTRY STUDY

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Abstract

The going green agenda or environmental protection has gained the attention of the industries. The tourism sector nowadays is not just a conservative industry that provides tourism activities but is now associated with sustainable practices (Bombiak, 2021). Hotels are very severely affected by the COVID-19 pandemic. Green intellectual capital (GIC) combines intellectual capital (IC), environmental knowledge, and awareness. IC is crucial in a firm and efficiently utilizing it will help enhance any organization's performance. There is limited GIC measurement as not many researchers have investigated GIC. This study aims to produce a GIC model for hotels to practice in their daily operation to enhance their performance. The current study employs a case study approach where five interviews were conducted with different personnel in Malaysia's tourism and hotel sector. The study identified eighteen indicators for the GIC model. The GIC model aids the firm in complying with environmental regulations, creating value for the firm, and meeting customers' requirements on environmental issues.

Keywords: Green Intellectual Capital, Sustainable Performance, Green Business Practices, Environmental Awareness

1. INTRODUCTION

In the past, people and businesses treated natural resources as limitless, which led them to the *tragedy of the commons* attitude (Hardin, 1968). A tragedy of the commons is defined as a condition where mankind acts in their short-term interest, depletes common resources, and accidentally jeopardizes their long-term interest. York and Miree (2018) discovered that ecologist Garrett Hardin first described the tragedy of the common idea in 1968, based on earlier ideas by economist William Forster Lloyd in 1832 and first referred to harvesting grounds. These over-extraction activities of the common lead to negative externalities (Masoudi & Bowie, 2021), which destroy the environment. With the increasing environmental issues in today's world, businesses need to observe their responsibilities towards the environment. These incidents show the need to introduce sustainable performance, in which the main objective of a business is no longer to achieve economic performance but to focus on social and environmental goals (Bombiak, 2021).

Due to the more conscious daily practices and the heightened concern for environmental protection, studies on sustainable performance are increasing. Recent research has emphasized the role of traditional knowledge-based dynamic capabilities in improving sustainable performance (Permatasari et al., 2022), green practices on the sustainable performance of hotel supply chains (Hussain et al., 2019), and the impact of green intellectual capital (GIC) on sustainable performance (Yusliza et al., 2020). From past research, it can be concluded that increased environmental awareness and strict international environmental regulations impact business sustainability. A business is considered sustainable when it does not merely focus on the economic and social aspects but also incorporates the protection of natural resources in its daily operation. This optimistic mindset has led businesses to invest in green innovation to sustain their business.

Besides reducing environmental degradation, GIC is known for achieving an organization's competitive advantage. According to Chen (2008), GIC is significant in enhancing the sustainable development possibility and improving a firm's performance and competitive advantage. To achieve sustainable development, GIC is crucial to ensure the implementation of green corporate practices is successful (Yadiati et al., 2019). Yadiati et al. (2019) show that applying GIC in an organization significantly influences environmental performance. Additionally, Yusliza et al. (2020) claim that GIC positively affects a firm's competitive advantages.

In today's knowledge-based economy, intellectual capital (IC) is crucial to an organization. Most previous studies focused on the IC and firm's performance, and only a few had focused on GIC and business sustainability. Yusoff et al. (2019) and Omar et al. (2017) endorsed that GIC influences business sustainability in Malaysian small and medium enterprises (SMEs) in the manufacturing sector.

Most past studies analyzed the GIC in the manufacturing sector (Ali et al., 2021; Chang & Chen, 2012; Chen, 2008; Mansoor et al., 2021; Omar et al., 2017; Sheikh, 2021; Yadiati et al., 2019; Yong et al., 2019; Yusliza et al., 2019; Yusliza et al., 2020; Yusoff et al., 2019). Not many past studies covered the GIC in the service industry. Susandya et al. (2019) researched the role of GIC in the competitive advantages of financial institution firms in Indonesia and found that all three of the GIC elements: green human capital, green structural capital, and green relational capital significantly affect the competitiveness. Assaker (2020), on the other hand, tested the green practices in green hotels in the UK and found that green practices directly influence the perceived value of the hotels. Alternatively, Hussain et al. (2019) found a positive impact of applying green techniques toward sustainable performance in hotels in the UAE. There is a lack of GIC measurement as not many researchers have investigated GIC. Therefore, this paper emphasizes investigating the GIC in the service sector, specifically the hotel industry. Additionally, as listed above, past studies of green innovations and service sectors are mainly conducted overseas, making them scarce in Malaysia. Hotels must apply the green concept as it attracts customers with the unique application of green innovations. Furthermore, publications dedicated to GIC issues have been explored for less than twenty years, indicating that the concept is still in an early development phase (Bombiak, 2021).

The structure of this paper is as follows. Section 2 reviews the relevant literature. Section 3 presents the methodology, which includes the data collection procedures and profile of samples. Section 4 presents the results of the analyses. Section 5 discusses the indicators developed for the model. Finally, Section 6 offers the conclusion, limitations, and recommendations of the study.

2. LITERATURE REVIEW

According to Omar et al. (2017), IC was first introduced in 1969 by John Kenneth Galbraith, who defined IC as a brainpower activity such as intellect, skills, and knowledge that, whenever utilized, creates value. Since then, IC has been a prominent topic of interest among researchers. There were various explanations and definitions of the term 'intellectual capital'. Abeysekera (2006) and Choong (2008) considered defining assets as the starting point in describing IC. IC may be referred to as intellectual material, such as knowledge, information, intellectual property, and experience, which can be applied to generate wealth (Choong, 2008). Now, IC has been acknowledged as a critical asset in achieving a competitive advantage. In the current knowledge economy, IC is the primary source of profitability (Russo & Fouts, 1997), and many studies have proven that IC contributes to the organization's performance (Gogan et al., 2016).

Even though the concept of IC has been widely discussed in previous years, the GIC notion has just been introduced by Chen (2008) due to the rising awareness of the environment. López-Gamero et al. (2011) clarified that GIC is an organization's overall knowledge that facilitates the creation of an environmental management system that then generates a competitive advantage. Additionally, full compliance with international environmental legislation is possible with GIC as it also addresses

the customer's environmental consciousness (Mansoor et al., 2021). Concerning this, GIC is viewed as the integration of capability and green knowledge of an organization to boost competitive advantage (Liu, 2010).

Thus, GIC can be a unique capability and a crucial element of an organization's strategies. This study refers to Chen (2008), who describes GIC as the accumulative supply of all types of intangible assets, experiences, capabilities, skills, knowledge, relationships, etc., about green innovation or environmental protection of both the individual and organization levels within a firm. The three categories of GIC are green human capital, green structural capital, and green relationship capital (Chen, 2008).

Human capital (HC) is regarded as the embedded skills, knowledge, wisdom, and experience of employees in an organization. Bontis (1998) claims that HC is important as it is a source of revolution and strategic renewal. However, human assets are a drawback because the organization cannot own them. In other words, when the employee leaves the company, the intangible asset will also leave. Scafarto et al. (2016) highlighted that expenditures on employees, such as education and training, are capital investments, and they produce HC, not physical or financial capital, as individuals cannot be detached from their skills, knowledge, or attitude the way financial and physical assets can be separated from the owner. The organization utilizes these intangible assets possessed by the employees to achieve a competitive advantage.

Therefore, Chen (2008) defined green human capital as the buildup of knowledge, competencies, practice and skills, attitude and commitment towards environmental awareness which is possessed by employees and not in organizations. Unfortunately, there is limited literature on green human capital (Yong et al., 2019). Yusliza et al. (2020) believe that training the employees would develop green abilities and increase skills as employees are responsible for the organization's operation. Therefore, green human capital allows the organization to acknowledge its intangible assets (skills, knowledge, and capabilities) and can help to apply green strategies in a competitive environment to improve performance (Yusliza et al., 2020). Yusliza et al. (2020) also argue that the top management plays a significant role in implementing green initiatives as the top management is responsible for translating the organization's goals to every level in the entity.

Unlike human capital, structural capital (SC) is embedded in the organization and cannot be separated from the organization even when the employees leave. SC is defined as the system, software, database, organizational culture, organizational procedures (that are on external media and not in the minds of the employees), trademarks, patents, and infrastructure required to support the operation of the organization (Chang & Chen, 2012; Sumedrea, 2013; Susandya et al., 2019). Due to the introduction of global environmentalism, knowledge of environmental protection and culture embedded in organizations play a prominent role in companies formulating and implementing environmental strategies to achieve new competitive advantages (Chang & Chen, 2012). Therefore, Chen (2008) promotes the novel theory of "green structural capital" and describes it as the supply of management systems, managerial philosophies, company images, patents, copyrights, trademarks, capabilities, knowledge, and culture of the organization about environmental awareness within a firm.

As a supporting factor for organizations' sustainable innovation (Massaro et al., 2018), green structural capital helps to implement formal organization to the environmental change. Green structural capital is significant for incorporating environmental technologies into firms' products and processes (Amores-Salvadó et al., 2021). Therefore, green structural capital is essential to guide the organization toward environmental efforts. In light of this, Amores-Salvadó et al. (2021) argue that green structural capital can assist in improving the efficiency of control and restoration initiatives, establishing, for example, protocols for the utilization of pollution control devices as well as preparing the firm to enter in the unfamiliar technological field, and guiding research efforts in new technologies. Hence, green structural capital is a versatile and valuable organizational intangible in the environmental strategies scope (Amores-Salvadó et al., 2021).

On the other hand, relational capital is the association and affiliation between the organization and its external stakeholders, namely, customers, suppliers, and the public. Rezaei et al. (2016) describe relational capital as the social capital that links the organization with external parties, suppliers, and customers, which permits the organization to buy and sell activities efficiently and effectively. This can be achieved once the organization has knowledge of its customers' preferences and the factors that lead to a good relationship with its stakeholders (Rezaei et al., 2016). Green relational capital, however, is the company's cooperative relationship with its external stakeholders, such as customers, vendors, partners, and network members, on environmental awareness and green innovation (Chen, 2008). Chen (2008) found that green relational capital positively affects competitive advantage. Agreeing with this research result, Rezaei's et al. (2016) findings also show a positive relationship between relational capital and competitive advantage. Hotels should manage their relational capital well to gain a competitive advantage and achieve sustainable performance.

By integrating quality and green management, supplier and customer influence are crucial for positive relational capital, innovation enhancement, and operational and environmental performance (Wu et al., 2022). This points out the importance of practicing the "green concept" in management to achieve green performance (Sheikh, 2021). Moreover, going "green" is a recent concern for stakeholders such as customers, suppliers, and the government. Hence, there is pressure on an organization to conduct a relationship with stakeholders concerning environmental protection. Therefore, relational capital is crucial to improving a firm's performance (Abdulaali, 2018).

GIC is relatively known to be a new strategy of company development based on environmental

protection (Susandya et al., 2019). Studies conducted by past researchers have proved this. Chen (2008) found that all three elements of GIC significantly affect the competitive advantages of SMEs in Taiwan. Rezaei et al. (2016) investigated the relationship between GIC and the competitive advantages of polluting companies in Fars province, Iran. They found that GIC is significantly influencing the competitiveness of the study subjects. The studies by Yadiati et al. (2019) also discovered that GIC influences the invironmental performance of Indonesia's manufacturing companies. Bombiak (2021) assessed the level of GIC being practiced in manufacturing firms and found that the degree of GIC adoption is above average.

The arguments above rationalize the need to implement the GIC model. However, conducting a GIC diagnosis is not straightforward due to its components' complexity, intangible nature, and the mutual relations of its component assets (Bombiak, 2021). Chen (2008), as the pioneer in this field of study, recommended a set of measurements corresponding to the three elements of GIC, as presented in Table 1.

Table 1. Green intellectual measurement created by Chen (2008)

Green human capital	*Green structural capital*	*Green relational capital*
1. The employees' productivity and contribution to environmental protection are better than the competitors. 2. The employees' competence in environmental protection in the company is better than the competitors. 3. The company's responsibility towards employees in environmental protection fields is better than the competitors. 4. The employees' teamwork regarding environmental protection is better than the competitors. 5. The company's management supports each employee who cares about the environment.	1. The management system related to environmental protection is better than the competitors. 2. The innovation related to environmental protection is better than the competitors. 3. The profits gained from environmental protection activity are better than the competitors. 4. The company's investment in environmental protection is higher than that of competitors. 5. The employees have better environmental protection awareness than the competitors. 6. The company's investment in eco-friendly facilities is higher than the competitors. 7. The development of competence related to eco-friendly services/products in the company is better than the competitors. 8. The management process in the company is still noticing the environmental protection ethics. 9. The company's environmental protection management is better than the competitors.	1. The firm designs products and/or services in compliance with the environmental desires of the customers. 2. Customer satisfaction concerning the environmental protection of the firm is better than that of major competitors. 3. The cooperative relationships concerning the environmental protection of the firm with our upstream suppliers are stable. 4. The cooperation relationships about environmental protection of our firm with our downstream clients or channels are stable. 5. Our firm has good cooperative relationships concerning environmental protection with our strategic partners.

Chen's measurements were applied to several past studies on GIC. Yong et al. (2019) adapted the GIC items in their study to investigate the relationship between GIC and green human resource management (GHRM) and uncovered that only green human capital and green relational capital significantly impact GHRM. Huang and Kung (2011) examined the impact of environmental consciousness and GIC on competitive advantage among Taiwan's manufacturing firms. The authors applied the items invented by Chen (2008) and modified them. They tested nineteen items of GIC. Their result revealed that environmental consciousness indirectly impacts competitive advantage through investment in GIC.

Based on the research question of how GIC is being measured in the hotel industry, the current study aims to develop a GIC model from the perspective of hotels in Malaysia by adopting a systematic literature review of GIC and gathering information through interviews on the current practices implemented in the selected hotels.

3. RESEARCH METHODOLOGY

3.1. Research methods and data collection procedures

This study applied a qualitative approach as qualitative research focuses on mankind, entity, organization, and the interactions among the three components in making sense of the occasions, attitudes, or consequences (Denzin & Lincoln, 2011). It is the process of understanding the everyday activity in the natural setting of the participants (Creswell & Creswell, 2018), and participants, as the knowledgeable party, will provide their perspectives based on the information requested from the researcher (Creswell, 1999).

The sample of this study was collected using purposive sampling, where only people who meet specific criteria are included in the sample (Kaliyadan & Kulkarni, 2019). The purposive sampling method, or judgment sampling, is the intentional choice of a participant due to the attributes the participant possesses. It is a nonprobability method that does not need underlying theories or a specific amount of participants (Etikan, 2016). In other words, the researcher determines what information to collect and strategizes to find participants who can and are willing to provide the information from their knowledge and experience (Bernard, 2006).

This qualitative approach involved semi-structured in-depth face-to-face interviews conducted from July 2021 to January 2022. The face-to-face interview method is chosen to ensure that the data being collected is more reliable as a person provides the information with first-hand

experience handling the hotel's management and operational administration. The respondents from the hotel management are the managers across various departments, namely the manager of the sustainability department, the managing director, and the human resource department.

The interviewees are from different departments. Hussain et al. (2019) claimed that green techniques applied in the hotel are related to the various nodes of the supply chain, and each of the managers is believed to have a better understanding of the advanced green and sustainability theories and applications. Initially, from the interview with the managers, the researcher aims to obtain an overview of the GIC elements being practiced in the hotel's operation. In addition, information on the effect of GIC practices on the performance of the hotels from social, economic, and environmental perspectives is also gathered.

The interview process continued until a level of saturation had been reached. Five interviews were conducted with different personnel in the tourism and hotel sector. Three interviews were with the managers of hotels adopting green concepts in Malaysia, an interview was with a deputy director of the Asia Africa division of Tourism Malaysia, and an interview was with a lecturer from the tourism faculty of a university. This study targeted a modest number of key respondents who could provide expert opinions on the topic rather than a more extensive sample size of lower quality. Data saturation has been met after reading and rereading the transcripts, where there is no new evidence of themes after the third interview. Table 2 below shows the profile of each sample being studied and the information on the interview.

Table 2. Profile of the samples and interviews information

Sample	Description	Date of interview	Mode of interview	Duration of the interview
Tourism Authority	A *deputy director* of the Asia Africa Division (DDAAD) of Tourism Malaysia (https://www.tourism.gov.my/).	June 3, 2021	Virtual — Google meet	1 hour
University	An *associate professor* in teaching at the Faculty of Hotel and Tourism Management at a University in Malaysia.	June 15, 2021	Virtual — Google meet	1.5 hours
Hotel A	*East South Asia & Pacific sustainability expert* This hotel is a franchise of an all-inclusive resort. It operates a total of 71 resorts around the globe. The hotel is in the heart of an 80-hectare forest by the beachside. The hotel's vision is committed to protecting the environment.	January 7, 2022	Virtual — Zoom	1 hour
Hotel B	*Human resource manager* A Singaporean company manages this hotel. This 4-star hotel is situated on an island in Malaysia with 34 luxurious, fully furnished rooms.	January, 20 2022	Physical — face-to-face interview	1 hour
Hotel C	*Managing director* This hotel is located on a tourist island in Malaysia. This hotel is a recipient of the ASEAN Green Hotel Standard & Malaysian Tourism Awards.	January, 20 2022	Physical — face-to-face interview	1 hour

The interview aims to identify the indicators of GIC being practiced by green hotels in Malaysia. The interview was divided into two sections: 1) Section A is on the hotel background and 2) Section B is on GIC. Each interview took around 1 hour to complete.

Section B of the interview focuses on the GIC approaches and the participation rate of the operators in adopting green practices. Some interview questions were adapted from Yusof and Jamaludin (2013). The interview questions are as follows:

I. Green human capital:
• Do you provide training on environmental management to your staff?
• How do you instill environmental concern in your employees?
• Do you practice waste reduction management in your hotel?

II. Green structural capital:
• Does this hotel own a green policy?
• What is the focus of your green policy?
• Have you received any international green recognition?
• What were the reasons for adopting green policy (enforced by parent company, own initiative)?
• How frequently do you monitor and review the environmental activities of your operation? (monthly review meetings, annual targets).

III. Green relational capital:
• Does this hotel select eco-friendly suppliers/ green vendors?
• Do you purchase local products from the community?
• Do you provide eco-friendly products in the guest room?
• Are you involved in environmental activities with the community?
• Do you adopt sustainable site planning and management?

All interviews were digitally recorded and transcribed. Based on the interviews, GIC practices of hotels were reviewed. Analysis was done using NVivo software to organize and analyze the data more systematically. Themes, categories, and codes for GIC were extracted and compared to the existing literature on GIC and sustainable performance. The study produces the indicators of GIC being practiced in hotels, which relates to the hotel's sustainable performance.

It is recommended that experts or professionals in the relevant area validate the derived indicators from the current study.

3.2. Data analysis

The data analysis occurred in three stages. First-cycle coding included in vivo coding, second-cycle coding, and code weaving to establish themes (Majid

al-Rifaie et al., 2020; Miles et al., 2019; Patel, 2014). NVivo software was used to organize the identified patterns, which lent itself to the coding process. Interview notes and memos were recorded manually, and descriptive notes were used to code and theme the data. The resulting codes and themes were then combined, and the code was weaved into concepts. Saturation was evident after analyzing the transcripts when repeating concepts were found after the first three interviews and no new concepts after the five interviews.

4. RESULTS

The analysis drawn through the NVivo software develops themes, categories, and codes. The theme for the analysis is GIC. The sub-themes or categories are green human capital, green structural capital, and green relational capital, which are predetermined through a literature review before analyzing the interview transcripts. Several codes under each of the three sub-themes of GIC are produced, whereby the codes created under the green human capital are knowledge, training and skills, and attitude. The codes relevant to green structural capital are policy and environmental, while the codes produced under green relational capital are relationships with non-customer and customer management.

During the transcript analyses activity, any statements the interviewees said or exclaimed related to the categories and sub-themes were highlighted and matched. These statements are the indicators of GIC being practiced in hotels. All the indicators were examined to categorize them into their respective codes. Figure 1 below shows the composition of the themes, categories, codes, and indicators derived from the interviews.

Figure 1. Themes, categories, codes, and indicators
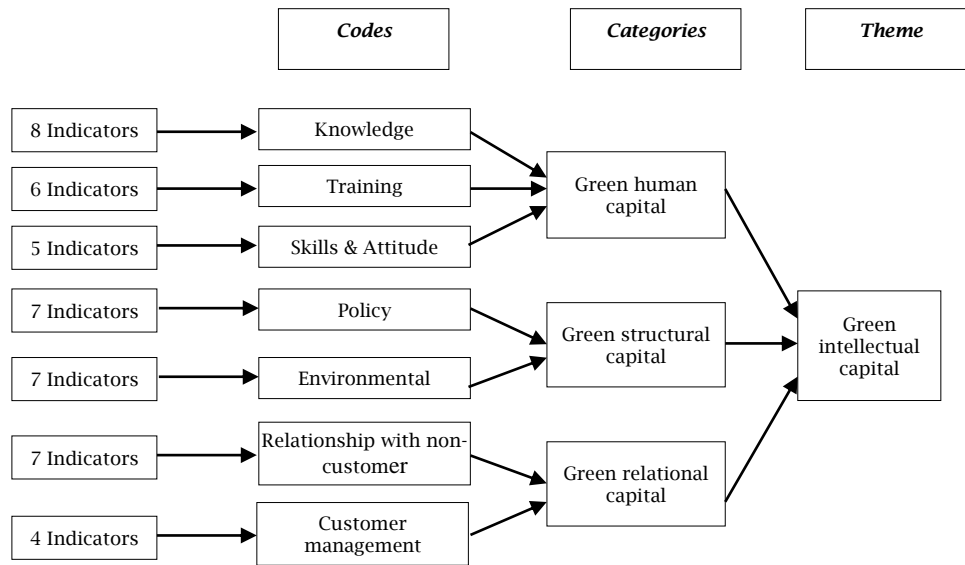
5. DISCUSSION

As mentioned in the previous section, the NVivo software has assisted in developing the themes, categories, and codes and systematically discovered the indicators for each code. Table 3 shows the categories, codes, and the list of indicators of each code of the GIC elements being identified.

5.1. Green structural capital

Structural capital (SC) is also known as organizational capital. Tangible knowledge such as missions, standard operating procedures (SOPs), and policies are recorded so the staff can share and refer to them. From the findings, the two codes identified under the green structural capital, namely: 1) policy and 2) environmental, are believed to have a positive impact on the sustainability of the hotels. The analysis has discovered seven indicators of green concept policies being applied by the hotels. These policies refer to the principles of action and guidelines about green practices adopted or proposed by the hotel.

As the interviewee in Hotel A states, *"…we have SOPs for everything, including the distribution schedule for bedsheets…"*. This statement indicates that the hotel ensures that proper rules, SOPs, and guidelines are in place, which is one of the policy indicators. Furthermore, the interviewee from Hotel C states that *"…if an employee forgot to switch off any lights or switches after usage, they would be fined 2 MYR the first time, 5 MYR the second time, and the amount will increase gradually. This is to instill the awareness in them"*. This indicates a merit and demerit system in their hotel policy for the operation.

Environment code refers to organizational practices specifically aiming to protect the environment. Here, seven indicators have also been discovered. The interviewee from Hotel C stated, *"…we limit the usage of chemical ingredients in our daily operation by using natural ingredients in termites' treatment and fogging"*. This refers to the indicator 'limits chemicals used in gardening' under the environment code. Also, she claims that *"energy is the most expensive cost after manpower. So, we use solar hot water, and we also have solar*

electricity panels". The hotel also looks at strategies to reduce cost and energy consumption.

Furthermore, saving energy and water consumption in the hotel industry is important to preserve the environment. The interviewee from the university described this: *"some hotels urge the guests to reuse the towels and save water and electricity. Some hotels communicate to their guests to save water and electricity".*

The SC indicators listed above imply that the hotels that were listed as adopting green practices have their own set of policies in line with environmental awareness, where they have their green concept standard for both the employees and the organization itself. The hotels also possess environmental awareness elements embedded in their policy structure. The strategies and actions taken by the hotels act as a set of guidelines and procedures to be carried out in their daily operation. These organizational strategies form parts of an organization's SC, where in this case, it incorporates the attitude of protecting the environment, i.e., applying green practices in their SC.

Table 3. Categories, codes, and indicators of the GIC elements

Structural capital	*Human capital*	*Relational capital*
Policy	*Knowledge*	*Relationship with non-customer*
Our hotel: • has its own green concept standard operating procedure; • ensures that proper rules, standard operating procedures, and guidelines are in place; • provides a bonus to employees achieving less waste; • includes merit and demerit systems among employees; • conducts training on green practice applications as and when necessary; • has a motivation system to achieve environmental objectives; • agrees that achievement of the environmental objectives is a crucial element of the hotel's corporate strategy.	*Our employees:* • environmental awareness knowledge is high; • understand that it is crucial to apply green practices; • having strong environmental awareness knowledge, help reduce cost, and improve performance; • consistently attend training to enhance environmental awareness; • show environmental behavior in the workplace; • are educated with sustainable performance fundamentals; • skills and knowledge are verified at periodic reviews; • are rewarded for engagement in environmental initiatives.	*Our hotel:* • supports local vendors; • establishes a good reputation with the community; • conducts business with green vendors; • gives back to the community by engaging with non-governmental organizations (NGOs); • engages in foreign environmentalists to help in educating the local community; • establishes a strong relationship with local people during the crisis period; • upholds good relationships with stakeholders during the crisis period.
Environmental	*Training*	*Customer management*
Our hotel: • provides electric free transportation to commute within the resort; • limits chemicals used in gardening; • confident that energy saving is an essential practice; • practices frequent monitoring of energy consumption; • includes a fraction of the 'environmental awareness' element in every training; • have environmental audits performed; • makes an adequate investment in environmental protection facilities.	*Our hotel:* • provides specialized training for every area (e.g., food waste training, waste separation training, etc.); • provides fun workshops to instill environmental concerns among employees; • provides educational workshops to instill environmental concerns among employees. *In our hotel:* • frequent training is necessary for employees on green practices; • frequent training improves sustainability; • frequent training instills environmental awareness among employees.	*Our hotel:* • practices superior customer service to sustain during the crisis period; • convinced that adopting green practices in hotel operations attracts guests from developed countries; • designs products and/or services in compliance with the environmentalism desires of our customers; • customers are satisfied with the hotel's environmental protection.
	Skills & Attitude	
	Our hotel: • encourages multitasking among employees; • employees are willing to multitask; • agrees that the cooperative degree of teamwork toward environmental protection is performed at high levels; • employees show high environmental behavior in the workplace; • employees' teamwork regarding environmental protection is high.	

5.2. Green human capital

Human capital (HC) is the employees of the hotels. The employees are regarded as an important asset to the hotels. Under HC, three codes were identified, which are: 1) knowledge, 2) training, and 3) skills and attitude. Knowledge represents the theoretical ability gained from experiences and training. Eight indicators were generated under the knowledge code. The employees are aware of the actions needed to protect the environment. The interviewee from Hotel C explains that *"…whenever the employees perform better in reducing food waste, they will receive the bonus".* It shows that this is the indicator where employees are being rewarded for participating in environmental initiatives.

On the other hand, training signifies taking or giving a course on topics related to environmental awareness. The interviewee from Hotel B revealed that *"…our recent training to the employees focuses*

on tree planting on beach sands to avoid erosions besides the scenic view from the plants". He exclaimed that *"...we have training for the waste separation, the eco gesture, the food waste, and the carbon dioxide action plan. So yes, we have a different kind of green practicing training".* These are the indications that the hotels provide specialized training for every area (e.g., food waste training, waste separation training, etc.) and workshops to instill environmental concerns among employees.

Besides, one of the interviewees claimed that *"...in which human capital will influence the economy as you enhance training, you contribute to more skills to your staff so they will increase the financial level of the staff. For instance, through promotion or increase in their salary".* This signifies that training is important to improve performance.

The code skills and attitude refer to the expertise, ability, way of thinking, and feeling towards environmental awareness. The indicators developed imply that employees' behavior is crucial for achieving sustainable performance. According to the interviewee from Hotel C, *"...I said, no guest, why doesn't you do this? The manager will always have one staff. You do this, but you won't want to go down to the ground. So now, whoever comes in, knows they will multitask because I think you have to start with the right philosophy. Then only it works".* The interviewee from Hotel B also claims that *"...If the staff is more satisfied by all these green team building activities, maybe create a kind of nice team spirit, reduce employee turnover and hence improve performance".* Therefore, the hotels recognize their employees as an important asset and develop a good working environment to make them happy, which will help improve their performance.

All respondents' responses imply that the green hotels strongly encourage the employees to be trained and given environmental protection awareness. The employees have also instilled environmental cautiousness in them and expect them to behave in a way that benefits the ecosystem in line with the green practices they apply. The employee's attitudes, knowledge, skills, and training given to them are classified under the HC element of IC. Where in this case, the actions and qualities exposed to the employees are more toward green concepts. Hence, it is categorized under the green human capital element.

5.3. Green relational capital

As mentioned, relational capital is the relationship with the stakeholders. Maintaining a good relationship with stakeholders and strengthening the networks among business contacts is important to achieve a competitive advantage and sustain better. Under the green relational capital, two codes were discovered: 1) relationship with non-customers, which indicates the relationship with all the stakeholders except for customers, and 2) customer management which denotes the association with customers.

Seven indicators were identified under the first code: relationship with non-customer. Stakeholders of non-customers include the community, local vendors, government, NGOs, and so on. The hotels need to engage them in their daily business to maintain a good relationship with them. As stated by the manager, Hotel B actively engages with its stakeholders, *"...we buy crafts such as wooden ashtrays, wooden trays from the local community to be used in our hotel"* and *"...we purchase hot and essential oils from local suppliers to be used in our SPAs".*

Similarly, Hotel A also supports the local vendors and community. The interviewee of Hotel A claims that *"...we have a fair-trade coffee. We have an FST paper product. We work with local farmers' produce".* The the officer from DDAAD of Tourism Malaysia also strongly believes that engaging with the stakeholders will improve sustainability. In his interview, he stated that *"...for example, whenever we want to promote one of the beaches in Malaysia, we always include the sustainable program success. For example, CSR [corporate social responsibility] with the local community, so that the people and the community know the importance of sustainable tourism. As simple as cleaning our beach".*

Under the second code, customer management, four indicators were identified. One of the indicators listed above is *"our hotel is convinced that adopting green practices in hotel operations attracts guests from developed countries".* This statement is being declared by the officer from DDAAD of Tourism Malaysia, who stated in the interview that *"...we can see especially tourists from Europe, they care about the environment".* Another indicator of customer management is that the hotel's design services comply with the environmental desires of their customers. Hotel C interviewee noted that *"...green brand; foreign guests in the developed country, respect it. They have high regard, and they do not mind paying for it. So again, that translates to a brand, a green brand, and people willing to take this".*

Therefore, under relational capital, the indicators signify that the relationship between customers and non-customers is equally essential in upholding green practices, which will help achieve sustainable performance. As seen from the responses given by the respondents, the green hotels in Malaysia prioritize their customers' needs, are environmentally cautious, and provide services that fulfill their customer's desires. The hotels strongly uphold their relationship with their customers, suppliers, and the local community. They encourage support for green products and services. This maintenance of relationships with stakeholders on environmental protection proves that the indicators form part of the green relational capital of the hotels.

6. CONCLUSION

The business landscape nowadays differs with environmental degradation, resource limitations, emerging technological developments, growing markets, and modern business models disrupting legacy ones. Organizations are vigorously seeking new, innovative strategies to go green that can be implemented to accomplish business sustainability. Hence, the harmful impact of human activity on the environment can be mitigated while not jeopardizing society's health and simultaneously generating profit. With this, GIC is a topic believed to be able to solve environmental issues and

accomplish business sustainability. Unfortunately, this area has been rather limited to only a few studies. Therefore, this study provides a better insight into the green concept substances to be focused on in the context of hotels in Malaysia. In conclusion, elevated awareness of environmental issues can motivate the hotel industry to implement green strategies in its operation. Hotels need to invest in GIC to assist them in achieving business sustainability.

This study faced several constraints. Firstly, this study was solely conducted in the context of a developing country, Malaysian hotels. Thus, the generalization and validation of the findings are minimal. Secondly, this study applied a modest sample size by only interviewing five respondents. This study targeted a modest number of key respondents who could provide expert opinions on the topic rather than a more extensive sample size of lower quality. Hence, larger sample sizes are required to validate the findings. Nevertheless, although this study faced some limitations, the findings still provided new perceptions of GIC in the context of the service industry, particularly the hotel sector, which is in a fast-moving business environment.

Recommendations for future studies, despite the limitations mentioned, are that this study can be extended in various directions. To begin with, future studies should investigate other service sectors, such as banking. Investigating the GIC concept in the food and beverages industry can also be interesting. Future research can also investigate the different degrees of GIC implementation between the two industries.

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